The Big One A Short Story by Fleataxi

Chapter 1

Bret Wilson lived near Crystal Spring, Northwest of Mount Wilson in the Angeles National Forrest. He grew up in Glendale, graduated from Glendale High, married his high school sweetheart Maggie, who continued to work as a model for the first 4 years they were married, until they started having kids. Bret's father was a very successful Real Estate Broker, and his Grandfather was a distant cousin of the man that Mount Wilson was named after, so the Wilson family was well connected. Bret graduated High School, and instead of becoming a Lawyer like his dad had hoped, opened a small Auto repair shop in Glendale, and moved into an apartment above the shop with his new bride.

5 years later, his paternal grandfather died, leaving him several million dollars. Bret spent part of it to buy 10 acres of property in the Angeles National Forrest near Crystal Spring and build a house, and the rest to buy out his competitors. They were all well-run shops, but were short of the cash needed to upgrade their shops to compete with the dealerships repairing the new heavily computerized vehicles required by California's draconian smog laws. Under Bret's ownership, they quickly took business away from the dealerships, who charged outrageously for out-of-warranty work. Bret made a ton of money between the 4 shops, and was able to buy a brand new cruising Trimaran and sail to Catalina Island each year for the Catalina Island Jazz Festival.

Bret's house took up the bulk of his new wealth, which he designed and built to withstand almost any possible earthquake or other natural disaster. He paid a contractor to dig a huge cavern into the hill and build a concrete dome structure inside that was several stories high. The lower story contained his Alternative Energy equipment including a huge 200KWh battery bank and 20KW worth of Outback Systems inverters plus several huge photovoltaic panels and a dozen Air-X wind turbines mounted outside. The contractor drilled a deep well which tapped a huge artesian aquifer to ensure an adequate water supply for any contingency. He buried 5,000 gallons worth of diesel and propane tanks as well. Once everything was in place, Bret installed a huge aquiculture system that combined a hydroponic vegetable garden with several large tanks of 80-degree water to raise Tilapia and vegetables year round. Another important addition in Bret's mind was their Ham radio shack. Both Bret and Maggie had their General licenses and kept in practice.

Bret's daily driver was a used blue Dodge Ramcharger 3500 4x4 with the Cummins Turbodiesel and the Bully Dog upgrades including the power module, Exhaust Brake kit, Gauge set, and propane boost kit. He swapped the skinny 275 profile tires it came with for BF Goodrich 33x12.5x15 Mud-Terrain tires which greatly improved his traction over the muddy fire road they lived off at a slight reduction in load capacity. He was glad he installed the Torsen rear differential and the Air Locker up front since more than once each year he pulled a neighbor out of the mud when they got stuck, or sometimes he needed the Warn 12K winch.

Bret's pride and joy was his diesel-powered Rock Crawler he named Babe because it was big and blue, and strong as an ox. Bret and Steve built Babe as a diesel-powered rock crawler just to prove it could be done. It took them 5 years to build it and break it repeatedly on the Rubicon Trail, which was supposed to be the toughest 4x4 trail in the US, as far as hard-core rock crawlers were concerned, then rebuild it better and stronger. After his most recent Rubicon run, he tore down the rear differential, and when he found 3 broken teeth on his Lock Right Differential, he decided to put a Torsen unit in the Ford 9-inch rear differential. Babe was registered and barely street-legal, but Bret preferred to tow it to any rock crawling events. Every time he ran the Rubicon Trail, he left sheet metal, and sometimes components behind. He preferred Moab Utah to Rubicon because he left less sheet metal behind.

Bret built an extension bridge out of pierced steel planking that stowed on Babe's ladder rack/roll cage at 10 feet, and extended to 17 feet to bridge any small gaps and was strong enough to handle Babe and the trailer, and then some. Next he built an A-frame boom out of threaded black iron pipe so he could use his winch to pick up and move the extension bridge, or other small obstacles. It connected to the bumper with 2 huge pivot pins, and used a comealong attached to the ladder rack/roll cage to adjust the height and angle of the boom. The whole thing broke down and stored next to the extension bridge on his ladder rack. He had a box full of spare parts, straps, cinches, pulleys, and a cargo net made out of kevlar straps on the rack next to it.

He carried extra fuel, spare tires and other parts in the bed that was really a cover over a hidden storage compartment in Babe. Up front he had a roller fairlead style 12K Warn electric winch mounted in a custom pipe bumper set. Under the hood he mounted a dual-alternator setup with an isolator to keep the starter battery from draining the deep-cycle battery bank of Concorde AGM batteries that powered his winch, lights, and radios. He mounted a set of Hella off-road driving lights to the top of his ladder rack, and a pair of Hella street-legal driving/fog lights to the custom pipe bumper/pushbar setup. He installed a complete undercarriage skid plate with Teflon sliders to protect it from high-centering on a rock and bolted diamond armor plate to critical components for extra protection.

Steve was amazed when they were finished, they had taken a Baja 1000 Class 4 (full-size pickup) frame, and converted it to a very capable diesel-powered rock crawler powered by what most would consider an undersized Nissan 2-liter turbodiesel. Steve knew it was partially due

to the innovative transmission/transfer case setup with a 3-speed transfer case (4G, 4L, 4H, 2G, 2L, 2H), and a 4 speed transmission that gave them 12 forward and 3 reverse gears. Bret installed a Ford 9-inch rear-end with a Lock Right limited slip, and an ARB air locker in the Dana 400 front differential hooked up to 4 BF Goodrich 37x12.50R18/D T/A Mud Terrains on 10-inch rims. All 4 corners had Warn locking hubs so it could be flat towed, or if he broke an axle or drive shaft, he could unlock the front or rear hubs and limp home. The granny/crawler gear was so low that they could idle the engine, and get out and walk next to the vehicle and keep up. Bret had climbed boulders that looked impossible between the torque of the diesel, the huge granny gear, and the extremely flexible suspension. He got good gas mileage in the 2-high position, and could drive in 4-high fast enough to race in Baja if he wanted to.

He had purchased a matching military open cargo trailer with a combination standard/pintle towing setup with the same BFG Mud-terrain tires and rims and re-arched springs to match Baby's lift. He could only carry an additional 2,000 pounds in the trailer, but he could keep it loaded and ready to go in a moment's notice if he had to bug out from work. He drove the Dodge 3500 back and forth to his garage where he kept Babe and the trailer in a heavily reinforced steel building inside the high-security fence on his lot, which was only a couple of miles from Glendale Community College, where he taught Automotive Technology 2 days a week. He drove the Dodge 3500 back and forth to work, because it got great gas mileage when he kept his foot off the accelerator and the seats were much more comfortable. Besides, it was designed as a road vehicle, whereas Babe was a street-legal rock crawler with removable fenders using Dzus fittings to hold the fenders and body panels on. With the fenders off, Babe was a much more capable rock crawler since the fenders interfered with the maximum axle deflection the vehicle was capable of. He thought of going with a PTO winch, until someone pointed out that he could still winch himself out of a predicament with a stalled engine using an electric winch, so despite the advantages of a PTO winch, he went with the rest of the rock crawlers, who he hoped knew what they were talking about, and got a Warn 12K electric winch.

His house was better prepared than most people's bug-out refuges, so he decided that bugging-in would be the preferred method of surviving an Earthquake or other SHTF scenario. He checked Timebomb 2000, and Frugal Squirrel's forums weekly, and learned a lot about preparedness. He was royally upset that California had gone so Liberal so fast, and had come up with ingenious work-arounds to their stupid anti-gun laws. Bret was going to purchase an AOW Winchester shotgun until 1 of the Squirrels suggested a Mossberg 590 with a Shotforce collapsible 6-position buttstock, a 6-shot Sidesaddle, and a Ghostring/tritium sight setup. Bret called his friend in Reno, and asked him about what he should buy. Nick offered to purchase a Kel-tec SU-16B with the shorter barrel, and the Mossberg 590 with the Shotforce stock. All he had to do was drive to Reno and pick them up, Nick didn't want to ship them across state lines.

2 weeks later, Nick told him they were in. He had bought 20 20-round AR-15 magazines for the SU-16 since they were difficult or expensive to get in the People's Republic, as Nick called

California. Bret had to agree - the only thing they were missing were the Mao jackets and the pins. Even with the creature comforts of his Dodge Ramcharger 3500, it was a long drive from Glendale to Reno. He decided to get out of the PRC as quickly as possible, and took the 210 east until he got onto I-15N. He switched to US-395N at Hesperia, and followed it North all the way to Reno. He stayed a couple of days to rest and shoot his guns - there weren't many legal outdoor shooting ranges in his part of California, and they were heavily controlled. Nick drove him out to the desert, and they shot up a bunch of ammo teaching Bret how to shoot the lightweight SU-16. He realized it would take a bunch of luck to hit a man-sized target much past 100 yards with the open sights. Still, the gun fired a .223 round, and folded into a small package that was much smaller than the shotgun. He drove carefully back home the next day, and put the shotgun and the rifle into his secret compartment of Babe. He included 10 loaded 20-rd mags in the LBV, 2 600-round combat packs of 5.56mm NATO surplus ammo on stripper clips, a bandoleer full of Federal Tactical 00 Buck and slug rounds, his E&E kit, a Level IIa vest, and a LBV containing a bunch of stuff that several Squirrels (the resident survival gurus on Frugal Squirrel's forum) had recommenced. His E&E kit included a butt pack on a pistol belt, a SAS drop-leg holster containing a Para-Ordinance Stainless P-14 in 45acp and 2 spare 13-round mags, He liked the Cold Steel LTC Kukhri and had a knife maker re-scale it in black canvas micarta with a finger-groove grip, add a lanyard hole and a thin steel guard. It rode in a Sheath Mechanic custom Kydex sheath that had a large pouch mounted piggyback with a mini-survival kit and a Diafold sharpener.

Rick's passion was cars, and off-roading, especially rock crawling, and indulged his passions whenever possible. Maggie accompanied him once on the Rubicon trail, and told him she was staying home from now on - the views might have been spectacular, but it wasn't worth getting killed getting there. He guessed the near-rollover scared her more than he knew. He tried to explain that sometimes you had to put a couple of wheels in the air to get around an obstacle, the trick was to keep at least 1 tire on the ground, and avoid rolling. She said she'd rather go trail riding and camping than try to climb some impossible boulder just because it was there. 2 days a week, he taught Automotive Technology at Glendale Community College, and had to leave the house at 6 o'clock to get to Glendale by 8 o'clock, a 28 mile commute. When he was just going to the shop, he left at 10 o'clock, and made it to work between 11 and noon. Half the time he took surface streets, since they were usually quicker, so he became very familiar with the surface streets between work and home, and mapped out several routes that could get him home, and bypassed major bridges and overpasses that might fall down in a major quake.

He was teaching class at Glendale Community College when The Big One hit, and he got his class evacuated onto the pavement in front of the shop, which was the safest place to be in an earthquake, since there were no surrounding buildings or anything else to fall on them. After several minutes, the shaking stopped, then the aftershocks began. He guessed the San Andreas fault had finally let go, and the aftershocks might be the rest of the major faults following suit. Once the excitement was over almost 10 minutes later, he went back in the shop, got the first aid kit and patched up any students who were injured, and told them that school was canceled,

and they should get home before the barricades went up. He gave them several pieces of advice - Stay off the Freeways and away from bridges, and watch out for sinkholes and large cracks in the road that could swallow their vehicles.

With that said, he walked out to his Ramcharger, started the engine, turned on the radios to find out what happened, pulled his Kel-Tec P-11 "glovebox gun" out of the glovebox, and drove slowly and carefully to his shop less than 5 miles away in Glendale. It took over an hour to bypass or clear all the debris and accidents blocking the roads, but he finally made it. His black shop foreman Leroy was in the process of shutting down and locking up. They talked things over, and decided the best thing to do was to take Babe and the trailer and head for Bret's house. Leroy was a recently divorced retired USMC Gunnery Sergeant, and lived in an apartment in downtown Los Angeles. Except for some clothes and stuff, he had nothing there of value since his ex got everything in the settlement.

Bret was glad that Maggie was home with their boys, and knew they were secure for the moment. He didn't even try the phone or his cell phone when Leroy told him that power and telephone lines were down all over LA County. He opened Babe's secret compartment, handed Leroy the SU-16 and told him he was riding shotgun. Since the SU-16 was similar to the M-16 and the AR-15, he didn't need much time to figure it out. Bret put on his Level IIa vest with his plates and his E&E kit, and handed the LBV to Leroy which held the spare mags for the SU-16. Bret took the shotgun out of the case, and mounted it to a bracket on the dash. Following several Squirrel's advice, he left 1 round out of the magazine so he could quickly switch from buckshot to slugs if needed, and the chamber was empty. Leroy whistled and said "Nice shotgun. Might come in handy!"

As they started heading east, Leroy said "Take the next right - I need to make a quick stop." When they stopped in front of a self-storage building, Leroy said he had some stuff inside he saved for a rainy day, and it was definitely raining. They pulled up to a door, and Leroy hopped out, took a key off his keychain, and opened the door. Inside were several boxes, and a familiar-sized case. They opened the top box, and Leroy unpacked an old USMC-issue Load Bearing Vest, and took Bret's off and handed it to him. While Bret put his LBV back on, Leroy kept digging and putting stuff on, including a Level IIa vest with plates, his LBV, a pistol belt with a butt pack and a USMC 1911 with the globe and anchor on the right grip panel, and finally an M -4 SOPMOD kit and several spare batteries with the M -203 grenade launcher mounted. He took out a mag, locked and loaded, then pulled out the next box, which contained a crate of 40mm HEDP grenades - 72 in total. Bret's eyes got huge when he saw how many grenades Leroy had and said "Is there something you want to tell me?"

"You know I was in the Marines during Desert Storm #2. I was a Gunnery Sergeant serving in a Marine Recon team with the 1st of the 1st. My best friend went into supply. Over the years, he's diverted obsolete or surplus equipment to his friends for safe keeping just in case we should ever need it. I took out this locker years before my divorce, and never told my ex about

it - good thing because that witch got everything else I owned, including a couple of matchgrade HBAR AR-15's. I was saving this for an emergency, and this qualifies. Let's get this loaded, and get you home."

"Leroy, I want you to stay with us, we've got the room, and if things get totally FUBAR, we could use the help defending the place."

Leroy stuck out his hand, shook Bret's and said "You've got a deal!"

They quickly loaded Babe, and headed East toward home.

Chapter 2

Once they got everything loaded, they pulled out on South Glendale Ave, headed east toward the Community College on North Verdugo Road. As they reached the college, one of his students flagged him down. He stopped since he knew the student pretty well, he was one of his best students, and he had already offered him a job upon graduation. "Mr. Wilson, the bridges are all down, our apartment's flat as a pancake, and we've got nowhere to go!"

"Who's we?"

"My Girlfriend Gloria and I. I've got my Jeep fully loaded with food, water, tent, sleeping bag, and some firearms for self-defense, but we've no place to go."

Thinking quickly, Bret realized that 2 more adults would be an asset, and he had more than enough food and water for everyone. Since it was summer, it was warm enough to sleep outside in a tent, besides he though that Jim and Gloria could use some privacy - he remembered what it was like when he was their age.

"Ok, you follow me, but keep a sharp eye out for danger. We've got about 20 miles to go to my house in the Angeles National Forest. If you don't mind sleeping in a tent, you'd probably have more privacy. I've got a deep well, solar power, and about 2 years worth of food, so we're fixed. We've got to cross the 2 and the 210 somewhere, then get onto Angeles Crest Highway. Hopefully the underpass on 210 will be intact, but getting across 2 could be interesting."

"That's what I've been trying to tell you - all the overpasses and underpasses on 2 are all down. How are we going to get home?"

"I planned on crossing 2 near the hospital, we either go over or under 2 at that point. Babe can crawl over anything smaller than a skyscraper in granny and I've got a winch and an A-frame we can use to move stuff with."

"Ok, we'll follow you -at least you've got a plan, most of these idiots are running around like a bunch of decapitated chickens. The Dean was trying to make everyone stay on campus where he said it was "safe" - yeah right! No water, power, sewer, most of the buildings are damaged and unsafe, and a limited supply of food - that's a disaster waiting to happen!"

"OK, Jim, follow me, keep close, and don't stop for anything or anyone. If rioting starts, drive through the crowds instead of stopping - remember Rodney King?"

"Ok, Mr. Wilson, whatever you say!"

"Jim, my name's Bret. Away from school and the shop, please call me Bret - my Dad's Mr. Wilson!"

"Ok, Bret...This will take some getting used to."

They got back into their vehicles and continued past the College and the Country Club, and only had to stop 6 times to clear wreckage and debris they couldn't go around, over or through. Leroy was pretty handy hooking up the winch, and leaving Bret behind the wheel sped things up, since he could pull stuff out of the way with engine power in Granny gear quicker than using the winch. Finally they cleared the last traffic jam, and drove past the Country Club with no further incidents. They looked, and the golf course was deserted, but the lot was full. He hoped whoever was in the lot survived the earthquake, he didn't have the time or inclination to check. From North Verdugo Blvd they could see that Interstate 2 was a disaster area of piled up cars, downed overpasses, and general mayhem.

Finally they turned right on Verdugo Blvd and headed toward the interstate. What he saw did not make Bret confident of his chances of getting home. The freeway resembled a giant angry child's playroom. He could smell the smoke and see the fire from several vehicles burning. There was debris all over the place, and massive concrete blocks that were too big to move blocked the underpass, and the bridges were down too. They stopped and discussed their options, and Jim suggested cutting the fence, driving across the freeway and down the other side, then picking up Verdugo again near the hospital. Bret wished he had a bulldozer to move the vehicles, then he remembered he had a push bumper, winch, and an A-frame crane to lift stuff with. He looked over at Jim's rig, and he had a pretty stout front pipe bumper and a winch as well. He asked Jim about it, and he said it was a 10K receiver-mount electric Warn winch. That gave Bret an idea - he could hook both vehicles up to an obstacle to move it quicker if necessary, or they could winch two different vehicles out of their way. "Jim, we need to clear a path through the interstate when we get up there so we can get through. We might have to winch abandoned or wrecked vehicles out of the way. We can't do anything for the accident victims, most of them are already dead or dying anyway by now, or they've left. If anyone tries to steal our vehicles, we have to shoot first and ask questions later - can you handle that?"

"Yes Sir, my Dad was in the Marine Corps, and taught me how to shoot, and instilled a survival mentality in me - I won't let you down." When they reached the fence, Bret swore. Leroy looked around to spot the trouble, and seeing none, asked Bret what was wrong. "That chain link fence protecting the highway has a top pole, and the supports are 6 feet apart, I need to break out my air hose and my air-powered reciprocating saw with a metal-cutting blade. While I'm cutting the poles, I need you and Jim to cut the fence so we can drive through." It took Bret a while to set up the saw, so Leroy and Jim had the fence cut by the time he was ready to go, and he made short work of cutting the support poles flush with the ground, and severing the top pipe, then he disconnected the hose from his air reserve tank, and coiled the hose with the saw still attached into the bed, since he'd need it again on the other side. They pulled the fence

open far enough to get both vehicles through easily, then got back aboard their rigs.

They crawled up the embankment in 4-wheel drive, and when they got to the top, they saw a mass of wrecked vehicles - some were on fire. They picked a spot away from the fires, and started moving cars. It took them a while to assemble the A-frame, but they found out that the time was well spent. If they picked up a car and moved it instead of just dragging it, they could move it quicker and easier. Even with their winches and A-frame, it took several hours to get across the interstate. Jim almost lost his cookies twice when he saw the occupants, or what was left of them, in burned out trucks. Somehow they gutted their way through it, and made it to the other side before nightfall. Not knowing what lay ahead, Bret suggested they camp in the hospital parking lot between their vehicles and try to get some sleep. The 4 of them could each take a 3 hour watch, get up at first light and get moving home.

Jim wanted to keep going, but after seeing the size of the cracks and fissures on the freeway, he realized if he ran into something like that in the dark, it could easily swallow his Jeep. Everyone had a pistol, and the watch stander would be sitting up where they could see out, and alert the rest of them at the first sign of danger, including anyone approaching their camp. They drove down the embankment, cut the fence, found an isolated area of the parking lot, and made camp between their vehicles. Before going to bed, Leroy attached the night vision scope to his rifle and tested it, then turned off the power. Around Midnight, Gloria awoke Jim, saying she heard something. He spotted about 10 armed men in the moonlight about 100 yards away moving straight toward them like they were trying to be sneaky, and quietly woke Bret and Leroy. They both got out their carbines. Leroy turned on his Night Vision Scope and loaded a 40mm grenade thinking "never give a sucker an even break."

He slid behind a vehicle after everyone got behind as much cover as they could, shouldered his M -4, spotted the intruders as clear as day in his scope and yelled "Halt! Drop your weapons, and advance slowly in single file, or we'll shoot!"

"Don't shoot, we're just trying to get home."

"Drop your weapons right now - you won't be warned again."

Leroy saw the leader of the gang raise his rifle and point it in their direction through his Night Vision Scope, and aimed at the center of the group. Before he could fire, Leroy launched a 40mm High Explosive grenade that hit the guy in the center of the column square in the chest, turning him into a red mist, and mortally wounding the rest of the gang of looters. A couple of single shots rang out from Bret's group as they shot the wounded. They couldn't take a chance that a wounded enemy wouldn't use his last breath to kill one of them. they huddled together the rest of the night with their backs to each other. At first light, Leroy went over to check on the group. They were loaded with gold and jewelry, and looked like they had been out looting and robbing. 2 of their AK-47's were in usable condition, so he removed them, and whatever

usable gear, magazines and ammo as he could find from the bodies, and left them were they lay. Seeing that Jim only had a lever action carbine, he gave the AK-47's to Jim and Gloria after showing them out to work the guns. Each AK had 3 loaded 30-round magazines with them, which was better than nothing. Bret was glad he put aside a case of 7.62 x 39 ammo at his house even though he didn't own an AK or SKS.

As soon as he finished, they packed up and headed home. They drove the rest of the way down Verdugo Blvd to Highway 2 - the Angeles Crest Highway. The 210 freeway was a disaster as well, and they couldn't get through the underpasses, so they took the rest of the day clearing a route through the debris. Finally, with a couple of hours of daylight left, they decided to try and make it to Bret's home. Once they made it into the Angeles National Forest, the only problems they faced were downed trees and cracked pavement. The few large downed trees were quickly cleared by throwing a choker cable around the tree and dragging it out of the way with the winches. They carefully crossed several cracks in the pavement that weren't much wider than their tires. Jim watched Bret cross at a slight angle so he only had 1 wheel in the crack at a time and successfully cleared the ditch. Jim cleared the crack, but with his smaller 31-inch tires, it was more exciting.

Finally they made it to Bret's fire road. They stopped, broke out the 30-foot towing strap and connected the two vehicles nose to tail, with Bret's more capable vehicle in the front to pull Jim through anything he couldn't make it through. He told Jim to leave his engine idling and transmission in neutral with the transfer case already in 4wd low for the long hill climb until he saw Bret struggling, then to engage 1st gear only until he saw slack in the towing strap, then to ease the clutch back in so he wouldn't ram Bret's trailer. Jim said he could make it on his own, and Bret said that this was just a precaution since he didn't know what shape the road ahead was in - there could be huge surface ruptures, the creek might have changed it's bank, or there might have been a mudslide across the road. Either way, they were safer roped together. At that point, Jim realized he could also anchor Bret's vehicle if he started sliding over a cliff or into a huge rupture. Bret put Babe into 4wd low range, locked the front differential, and turned on all his lights to make sure he could see everything because it was quickly getting dark. When they were a mile from the house, he turned on his Ham radio on low power and said "Honey, I'm home!"

Hearing Maggie's voice on the radio brought tears to Bret's eyes "Bret darling, the kids and I are fine." He was glad to see she still used the old codes. Years ago, there was a rash of home invasion robberies in the area, and they developed that code to ensure that neither one of them was held hostage. If she'd said "the kids and I are great" she was in trouble. If he said "Lucy, I'm home" he was under duress. 10 minutes later the weary travelers pulled into Bret's lot in front of his house and shut down the engines. As soon as Bret's feet touched the ground, Maggie grabbed him and gave him a passionate kiss, then he was mobbed by his 2 boys. Alan was the oldest at 15, followed by Jeremy at 13. The 2 boys were home schooled, since the nearest school was over 2 hours away round trip, and they weren't too happy with the

curriculum, the teachers, or the principal. Both boys were reading 1 grade level above where their peers were, and the had excellent scores on the standardized tests. Bret gave them weekly lessons in Survival, and a weekend together often meant camping, fishing, and shooting or hunting if it was in season.

Bret had over 2 years worth of food for his family stored in his basement, and over a year's worth of propane and diesel in his tanks. To backup his 20KW AE system, Bret bought a 5KW China Diesel generator optimized for charging his 200KWh battery bank. The AE system was by Outback Systems, so if he didn't use the full 20K, the unused inverters would shut down and draw no power. He had a 15KWh bank of solar panels, combined with 4KWh of wind turbines to power his AE equipment. The house was literally tunneled into the hill, so their heating costs were almost non-existent. He had a huge masonry heating stove with a cooktop in the middle of the house for winter heat, and during the summer, they got a nice breeze. Even without the heater, it rarely got below 60 inside the house. They had a bunch of south facing windows for solar heat gain and light, and he had a set of half-inch armor plate steel shutters with firing ports built and hung to cover the windows at a moment's notice that would stop anything smaller than a 50-caliber round.

Once they got everyone unloaded and situated, Bret asked Maggie to tell him what had been going on. She said that 2 days ago, the TV network affiliates were describing massive and widespread damage from North of San Francisco into Baja California, Mexico on every local channel she could get. The station meteorologist, who doubled as their "earthquake expert" was showing what happened on a Tele-strator. The San Andreas fault was the first to rupture, and it moved along it's entire length. In places it only moved inches, and in others it moved up to 30 feet. The tentative magnitude of the first quake was set at 8.5 on the Richter scale. When all that energy was released, he said that several major faults let loose as a result, including the Rose Canyon fault in San Diego County (6.3) and the Coronado bank zone offshore (5.5) which resulted in 50-100 foot Tsunamis devastating the coastline and several miles inland from San Diego to Long Beach. Further North, the Elsinore Fault Zone (6.1) failed in several places, destroying Elsinore, and swamping surrounding communities when Lake Elsinore displaced 1/3 of it's volume as an inland lake tsunami. Near Santa Ana, the Newport-Inglewood-Rose Canyon complex (4.5) ruptured in several spots, causing moderate damage. The San Jacinto Fault (7.3) ruptured along it's entire length, resulting in heavy damage in the built-up areas around San Bernardino and Riverside. Between the Chino(4.0) and Cucamonga Faults (5.0), Pomona was toast! Palmdale was ground zero of the worst of the damage from the San Andreas fault, and virtually none of the buildings in Palmdale or surrounding communities were left standing, and fires were raging unchecked as natural gas pipes ruptured because over half the houses and commercial buildings in Palmdale didn't install a simple safety valve that wasn't required by building codes until years after the buildings were built. Several people who did install the valves were victims of their neighbor's carelessness, and their houses burned anyways when they didn't have any water pressure to fight the fires.

The news helicopters sent back vivid images of death and destruction, with apartment buildings, houses, and any unreinforced multi-story buildings knocked flat as a pancake in most areas. There was exceptions to every rule, like a house that was standing in the middle of destruction that was designed by an earthquake engineer. The entire building shook as one piece, and floated like a ship. When it was all over, all he needed to do was jack up the low corner, and shore it up to level the house again. All his connections to the utilities were via flexible connections with emergency disconnects, and the shell of his house was fireproof as well. Maggie saw the image of the house standing while it's neighbors looked like a hurricane had struck and wondered if a Squirrel lived there. The entire LA basin looked like someone had nuked it between the collapsed buildings and the raging fires caused by gas leaks and downed electrical wires before the power was shut off. Without power, there was no water pressure to fight the fires, and the firefighters were overwhelmed.

Northern LA County didn't fare much better between the Oak Ridge (4.5) and the Santa Ynez (5.3) faults, Ventura and Santa Barbara were reduced to smoking rubble. Between there and Cajon Pass, several previously unknown faults resulted in moderate to major damage in any built-up areas, and destroyed sections of I-15. The Meteorologist said that all major California freeways were closed until further notice, and travel was restricted to emergency vehicles only to keep the surface streets clear. All the populated areas between Santa Barbra and Morro Bay experienced moderate to major damage depending on their proximity to a major fault line, and the density and construction of buildings. All of the cities in the San Joaquin Valley that previously experienced quake damage were heavily damaged by the huge earthquake along the San Andreas fault line. Survivors claimed that the shaking lasted for minutes between the main shock and the aftershocks. The bigger towns and cities were wiped off the map, including Hollister and Watsonville.

Several fault lines between San Jose and San Francisco completely ruptured, resulting in catastrophic damage and high fatalities as fires killed those trapped in collapsed buildings. Silicon Valley ceased to exist for all intents and purposes. Thousands of workers were fatally injured by flying glass when the huge glass facades of the art-deco buildings exploded into lethal shards and flew in all directions. When the San Andreas fault under the Pacific Ocean west of San Francisco ruptured, it resulted in an underwater landslide and a 100-foot plus high tsunami that flooded all the low-lying areas around San Francisco Bay. Combined with the collapse of every Bay bridge, and all the major structures in the area, San Francisco, Oakland, and the surrounding area experienced casualty rates as high as 100%. Anyone who survived in that area stood a good chance of winning the Lottery. Eastward toward the Sacramento Delta, the Tsunami reversed the flow of the rivers that emptied into the bay, resulting in Salt Water incursion, destroying thousands of acres of crop land, and flooding nearby low-lying areas.

Maggie told them that they experienced some shaking, and minor breakage and damage. The house was built much stronger than it had to be, and the worst damage was some minor cracking of the shotcrete they used to support the cavern that they excavated to build the house

inside the hill. She told them that later the next day, the Meteorologist reported that the USGS was worried about Mammoth and Big Bear lakes in California, which showed signs of increased activity. Mammoth Lake was 280 miles to their North-Northwest, and Big Bear Lake was 96 miles to their East, so Bret wasn't too worried since the prevailing wind blew West-East.

Chapter 3

When he heard of the level of destruction, Bret was glad he was already sitting down, or he might have fallen down. He knew that there were approximately 36 Million people in California, and if he included just San Diego, Riverside, Los Angeles, San Bernardino, Sacramento, Orange, and Alameda Counties, there were 23 million people affected by the earthquake. Even assuming a 50% Casualty rate, over 12 Million people were either dead or dying just in California. If Big Bear Lake, Mammoth Lake, or Mt. Shasta were to go active, and possibly erupt, the numbers could easily double or triple.

What really scared him was the thought that this was just a trigger event for an economic collapse of the US, because the economy was in the tank already, and the rest of the US couldn't make up for the productivity of California, even with the lost electrical demand. The San Joaquin Valley produced most of the vegetables and fruit consumed in the US. Without it, food prices would go way up almost overnight as the supply dropped and the demand rose. He thought about the 3 people he had added, and what they'd do to his food supply, and realized he needed to either purchase more food, or produce more. He had the ability to double his aquiculture setup using stored equipment, so that would be the first thing he'd do. Next he might consider an outside truck garden to trade with his neighbors for eggs and meat. He was glad he had 5,000 gallons of Diesel and propane, and the tanks were just recently filled. He had an adequate supply of ammunition for the weapons they had, and he hoped that they wouldn't get overrun by hordes of refugees, especially the ones who were willing to take what they had by force. One thing he had going for him was that few people drove this direction to the Angeles National Forest, and even fewer realized it was populated, since the natural trees and chaparral weren't bulldozed to make room for housing subdivisions.

Bret explained what he was thinking to the rest of the group. The key was how long it would take for California to recover from the damage, if it could ever. With twice as many people as he had planned for, his 2-year supply of food and supplies would now last maybe a year, and he was pretty sure that California couldn't get their act back together in a year. Leroy suggested going back to the shop with Babe and getting his Ramcharger, then go salvage an abandoned Wal-Mart or a grocery store for enough supplies to last several years. If they unloaded Babe's trailer, and filled the bed of the Dodge, they could carry quite a lot of stuff in cases or on pallets if they could figure out a way to get them from the floor level to the bed of the truck. Bret said he needed to talk to Maggie alone for a minute, and he'd be right back.

"I wanted your opinion about this without you having to talk in front of everyone else. The risk is pretty high here, but if we run out of supplies, we'll be worse off - I was thinking it would be better to get stuff now while it's available and unguarded, then later when it's either guarded or gone."

"Bret, this sounds like looting to me."

"The difference between Looting and Scavenging is whether the National Guard is watching." There's a better than 50% chance the owners of the property are dead, because the reported casualty rates were between 30% and 100%. I know which stores I'm going to try first, and hopefully we can get everything we need, and get back on the road home quickly. Unless someone has messed with our route, the route into Glendale should be wide open, and all we have to do is drive. Even the old Dodge Ramcharger can make it though the path we cleared. I was going to drive Babe back, and let Leroy drive the Dodge back."

"Why not have Leroy ride shotgun with you, and have Jim drive the Ramcharger - that way you'll have more people to defend yourselves if things go bad."

"Good point, I'll ask them. If we're going to go, we need to leave first thing tomorrow morning, so we need to get some sleep." Bret pulled out his Thomas Guide, and checked the route from the College to the Wal-Mart. If he went down North Glendale Ave. he'd have to cross the 134 freeway, but he'd have to cross it somewhere anyway. He wished out loud that there was a big department store in the same quadrant as the college. Maggie was looking over his shoulder, and said there was a Ralph's Grocery store right down the street from the college. They should check that first. Bret stood up and gave her a hug and a kiss "I remembered why I married you - you're so smart - I was going to drive all the way to Wal-Mart, and have to cross under another freeway when Ralph's should have everything we need. If it already hasn't been looted, we should hit it first thing in the morning." He walked out and told the rest of them the good news. Jim volunteered to drive the Dodge back, and Gloria would drive the Jeep. Maggie needed to stay there with the boys, so that let her out. Maggie said dinner would be ready soon, and they all should take a shower while they could, and go to bed early so they could get an early start. Bret showed Leroy, Gloria and Jim the guest bathroom, and they flipped a coin to see who would go first.

Meanwhile Bret took a fast shower, got into clean clothes, and started writing a list of stuff they would need to extend their supplies a few more years if necessary. They'd need paper products, soaps and detergents, feminine supplies, basic medicines, canned foods including canned meats, staples, and spices. When he was finished, he almost filled a legal pad with his list. He showed the list to Maggie, who made some suggestions. Once dinner was ready, they all managed to sit at the dining room table, Bret said grace, then they ate quickly. Once dinner was over, they started heading to bed. Jim and Gloria decided to sleep in the living room tonight instead of pitching a tent, and Gloria told Maggie not to worry, if they needed some privacy, they'd pitch a tent - it's just that it was too late already, and they were leaving at the crack of dawn tomorrow.

The next morning, Maggie made breakfast of scrambled eggs and ham, then they used the bathroom and got ready to leave. It took them less than an hour to unload the trailer and put the

stuff in the garage. Bret felt vulnerable riding without the supplies in the trailer, so he moved his BOB to the bed of Babe just in case. They left early in the morning, but not until after Bret got a hug and kiss by Maggie, and she got a promise to be careful. The road was OK, and they were going downhill, so they didn't need to link up this time, and made it back to the Angeles Crest Highway. They made good time, and all their trees were still moved out of the way. Before he knew it, Bret was at the 210 overpass, and found their holes were undisturbed, and was really surprised that there weren't deep ruts running through the gap. They got back on the road, and drove past the hospital without incident. Next they tackled the 2 freeway, with the same results. Finally Bret turned on the CB and found out were all the police and NG units were - there was a huge looting riot going on at the Galleria Mall. He was glad they didn't go to Wal-Mart because it was less than a mile from the Galleria, and the police would be on them like white on rice.

When they got to the other side of the freeway, Bret looked up and saw a U-haul store on the corner of Verdugo and Clifton Place. He made a hard right, but Jim managed to follow him, and was wondering what was going on until he saw where Bret was going. They picked the lock on the gate, and quickly hitched the largest open-top cargo trailer Jim's Jeep could pull that short of a distance to his trailer hitch. They drove to Bret's shop, retrieved the Dodge, loaded a bunch of parts, tools, oil, and stuff into the back of Babe, and Leroy drove the Dodge back to the U-haul place to grab an even bigger trailer. Finally they made it to the Ralph's, which was deserted, so they drove around the back. Bret wasn't worried about the alarm since the power was out, so he cut the lock with his universal key, and rolled up the roll-up door. The place was starting to smell from rotten meat, so they worked quickly and loaded cases of the supplies they needed onto the 3 trailers using pallet jacks and rollers. Later that afternoon, they were finished, and the 3 vehicles and their trailers were as full as they could get them. Bret spotted several large tarps and rope, so he covered the loads, tied them down tight, and rolled the door back down in case they could come back later for more stuff. Pulling the heavy trailers, it took longer to get home, but they made it before dark, and unloaded everything while Maggie made a list of what they had.

The next morning, Bret checked the CB, and there was still rioting at the Galleria. It was spreading along the 134 Freeway, but was staying on that side of it. Bret called everyone together, and asked them if they were up to raiding the Ralph's a second time. There was a lot of stuff there they could use, and they might not be able to get it later. They agreed to go despite the risks when Bret told them the rioting had spread from the Galleria along the 134, and it was obvious that it was only a matter of time before it jumped the freeway. Bret gave Maggie a hug and a kiss, and another promise to be careful, and they drove the 3 vehicles back to Glendale. This time, as they passed the hospital, several shots rang out, but no one was hit, so he didn't know if they were aimed at them. The route was wide open, so they drove as quickly as they could while maintaining a good lookout for ambushes and traps. Right as they got to the Ralph's, a purple Mazda drove up next to them, and the passenger rolled down his window and stuck a gun out the window. Bret didn't know what he was up to, maybe he

wanted to carjack the whole convoy since he drove past the other vehicles, and tried to make Bret pull over. Instead, Bret grabbed the pistol grip of his shotgun, stuck it out the window, and pulled the trigger. The 00 buck shredded the passenger side, and obviously some pellets reached the driver, because he swerved and crashed head-first into a telephone pole. They decided to keep going, and pulled into the back lot of the Ralph's. This time Gloria kept watch while the 3 of them "scavenged" anything that they needed and would fit in their trailers or vehicles. After the near-carjacking, they agreed this would be their last scavenging run. This time Bret concentrated on the pharmacy, grabbed the OTC meds and anything useful since they had cleaned out the paper products last time. Jim cleaned out all their cases of canned meat and seafood, as much of their "just add water" mixes as they could carry, cases of instant soup mix, including a pallet load of "just add water" potato soup mix, a pallet full of cases of powdered scrambled egg mix, a case of #10 cans of spaghetti sauce with meat, and several cases of pasta, rice, and cheese and macaroni mix for the kids (at least that's what he told Gloria). Leroy took all of the quart canning jars with lids and rings, 3 12-quart stove-top canners with a Ball canning book, and a case of canning salt. He was wondering why a Ralph's stocked canning supplies and canners, but decided to save the deep thoughts for later - they were in a hurry. If someone showed up, Gloria was to lean on the Dodge's air horn, which could be heard for miles. She had her AK-47 and all 6 magazines just in case. The scavenging teams were only carrying their pistols, and their carbines were in their vehicles, so if someone came in the front, and they couldn't persuade them to leave, they were to flee out the back for their hardware.

When they finished, the vehicles and trailers were down on their overloads, and were as full as they could get them. Bret rolled the door back down, and they drove slowly and carefully back to Bret's house. The Mazda was still smoking when they drove past, and this time there was no shooting when they got near the hospital. 2 hours later they made it home, exhausted and glad that they were through scavenging. When they finished storing everything, Maggie finished her spreadsheet, and gave Bret the good news - they had 3-4 years worth of supplies for the 8 of them, without growing their own food. If they stretched it by growing vegetables and fish, they could easily get by 8-10 years. They'd have to be real stingy using paper products, and everything else would have to be reused and recycled. If they raised pigs, they wouldn't need a trash can, since they were going to recycle everything including paper and cans. If the paper was too dirty to reuse, they'd burn it in the auxiliary water heater (a home-built unit Bret saw on the internet that conveniently burned wood and paper trash, and heated the water in the Tilapia pond and kept it around 80 degrees.) He had another idea about feeding the fish some worms he could grow in the inedible vegetable refuse and other stuff. The worms would make humus out of the junk, and the worms could feed the fish. His friend Brad down the road was raising worms to sell for bait, but with the emergency, he could guarantee there wasn't much sport fishing going on for quite some time. He made a note to check in on him, and see if he could buy enough worms to get started.

The next day Bret drove down the road to his friend Brad's house. When he told him what he

wanted to do, Brad gave him several large Styrofoam cups full of worms, and enough racks to get started. Brad spent the next hour giving him detailed instructions in the art of worm growing, then sold him 2 bags full of starter since he didn't have enough materials coming out of the hydroponic system right now to feed the worms. Brad said when the worms got too crowded, drop the dead bodies into the water, and the fish would take care of the rest. He told Bret that feeding the fish worm bodies was an inspirational idea.

"If you want to get started, I can give you some fry once you have your pond built. You have to be careful with Tilapia since they're temperature sensitive tropical fish, and do best in 80 degree water, anything below 70, they got lethargic and stopped growing, and they started dying at 60 degrees from the cold."

Brad thanked Bret, then gave him a dozen foam cups of worms, and 2 more bags of starter. When he got home, the fish got an early snack when he discovered some dead worms in the Styrofoam cups. Brad said that would happen, and he should just feed them to the fish.

2 weeks later, Brad stopped by - he had converted an old Hot tub to a Tilapia pond. He didn't need the aquiculture part since his garden was outside, where God intended it. Bret netted a dozen juvenile fish, filled a bag full of pond water, and stuck them in it after filling it full of air and tying a big knot. "Make sure there's no chlorine in the water, or any residue in the tub, just a little chlorine or chemical residue can kill Tilapia."

"Don't worry, I only filled the tub with the water from my natural spring, so there never was any chlorine in the water. It's wood heated, with a blend valve that I can set as low as 80 degrees."

Later that week, Bret stopped by Brad's house, and everything was going great, the fish were thriving, and were noticeably bigger. Brad told him that he fed them a whole rack of worms that week when the worms died. At that rate, they'd be to eating size in months.

Bret showed him how to spot the females, and told him never to eat more than half his females, or 2/3 of his male fish if he wanted to maintain a viable population. "It would be even better if you had 2 ponds to segregate the males and females, since the males are very territorial. 1 or 2 males can fertilize the eggs of a dozen females. One thing, you better get a good pump and filter system, because without the hydroponic system keeping the water clean, their crap will build up, and kill the fish."

"Oops! Do you have any extra supplies so I can build a large enough hydroponic system to keep the water clean?"

"Lucky for you I've got almost 1000 pounds of hydroponic media in storage. All you'll need is the trays, benches, and a good circulation pump."

"Wouldn't the pump on my Hot tub work?"

"Probably too well, you only need a couple of gallons per minute to filter the entire tank through the hydroponic system. At the kind of pressure and volume your filter pump works, it might damage the hydroponic system."

"Guess I'll just have to work something out. I'll call you when I'm ready for the hydroponic stuff."

Two days later, Brad called on the radio saying his fish were all dead. Bret drove over, and commiserated with him, then theorized that the redwood tub might have absorbed detergents from swim suits, etc. over the years, and poisoned the fish. He told Brad that he could eat the fish if he wanted to, but they were too small to be worth the effort. Brad said that he already buried the fish in his compost pile.

"Bret, remember old man Miller's place up the road - didn't he raise horses?"

"Vaguely - what do you have in mind?"

"I'd like to borrow several of his galvanized horse troughs, they have to hold a couple of hundred gallons each."

"If you could keep them all warm, that might work, since you could segregate the males from the females, and have a smaller fry tank to keep the fry in to keep them from getting killed by the bigger fish."

"I was just barely utilizing that wood-fired water heater, I think it could easily keep 400 gallons of water at 80 degrees all day."

"What about a pump?"

"You know me, never throw anything away - I found an old pump from a salt-water aquarium I used to have. If I flush it out with fresh water, it should be as good as new."

"Have you found anything for hydroponic trays?"

"How big do they have to be?"

"The commercial hydroponic trays are 6" deep for shallow rooted foods, and up to a foot deep for carrots and other tubers. My tanks are 2 feet wide by 10 feet long, and they connect in series as long as the benches are stepped progressively lower so siphon action transfers water from tray to tray."

"How do you do that?"

"The tray closest to the source is the tallest, then each tray is 2-3" lower, and you clip several 1" plastic hoses between the tanks and siphon action drains the water from the higher tank. I'll help you set it up once you get your tanks. The minimum set-up to keep the water clear is 4 10-foot tanks. If you don't want the vegetables, 2 tanks full of cattails will clean the water just as well, but you waste the electricity making sunlight on cattails."

"Forgot about that - the plants need to grow in winter to keep the fish from dying. Why don't we just go fishing?"

"Someone might come through with a net and catch most of the fish at once, not thinking that he just killed off a renewable resource in his greed, or it could be too dangerous to leave our compounds if the stuff hits the rotating blade."

"Ok, makes sense to me. I'd rather stay at home anyway. Ever since I quit the Sons of Satan and became a Christian, I've felt like I'm riding around with a big target on my back now that I wear a cross instead of my gang's colors on the back of my leathers."

"At your age, just riding that hog at the speed you drive could kill you - you don't need to worry about any rival gangs taking you out!"

"I guess I could slow down, but it's so much fun to ride fast in the desert."

"Just how fast do you go?"

"Last trip I made with the Christian Motorcyclists Club, I was averaging right around 80. That's slow compared to my Sons of Satan days."

"Glad to see you're slowing down in your old age!"

After they finished, they drove over to the old Miller place, and it was abandoned. There weren't any horses around, and all the trailers were missing. Out in the barn, there was 4 stacks of galvanized horse troughs. Bret shook his head when he realized they were almost exactly 2 feet wide and 10 feet long, and more than deep enough to use as hydroponic tanks. He suggested that they take all the troughs, which would give him 4 Tilapia tanks, and 8 hydroponic tanks if he wanted them. They muscled them 3 at a time into Brad's and Bret's trucks. 3 hours later, they drove back to Brad's place. Brad thanked Bret, and told him it would take a couple of weeks to build the benches, so he'd call him when he was ready for the new fry. Bret suggested putting the tanks up on concrete blocks if he was comfortable bending over, since that much water weighed over 800 pounds! Brad thought that was a good idea, if he could find enough blocks, he'd call him sooner. With that Bret drove back to his house.

Chapter 4

While Bret was visiting with Brad, everyone else was getting things organized. When Bret came home, Leroy pointed out that if they were to have any chance of repelling attackers, he needed to clear a 200 yard perimeter, and he had maybe 100 yards cleared right now. Bret was suddenly glad that there were 2 additional strong males in their group now - cutting, hauling, and splitting all that wood would be a lot of work! He called Brad, who offered his services and his chain saw if he could take some of the wood. Bret knew that if they felled all the trees in a 200-yard radius of the house, it would be more than 5 years worth of wood. Even if he gave Brad 1/3 of it, he'd still have several years worth, and he had over 10 acres of wooded property. He asked Brad if he could come over tomorrow, and he said he'd be there at first light, and he'd bring his hydraulic splitter. Bret forgot Brad had one - that would make things much quicker and easier. Bret was glad he had 200 gallons of stored treated gasoline - they were going to need maybe 50 gallons for this project. The next morning, Brad showed up with his old pickup, towing his splitter and a 4wd ATV to haul the wood out to where they would split and load it into the pickup beds.

They first cleared the brush using a couple of gas powered line trimmers with brush blades. Once the brush was cut, everyone else piled it off to 1 side to feed the waste burner later. The chaparral burned very well in the masonry stove, but Bret had plenty of trees and decided to burn it in the water heater for the aquiculture setup. By the end of the day, all the chaparral was cleared and they could start logging tomorrow. The next morning they were back at it. Bret and Brad were going to operate the chainsaws, and everyone else would help limb and drag the logs over to the splitter. The burnable limbs would join the chaparral pile unless they were big enough to go into the stove pile unsplit. Since most of his property was various varieties of pine trees, Bret had to let the wood cure after he split it, or it might really mess up his chimney. Brad and Bret started on opposite sides of the clearing, and worked toward each other. When they got too close, they would alternate felling trees until they were all down. By the end of the day, they had felled several hundred 8-inch pines. Jim and Leroy were working up a sweat with their axes limbing the trees. Gloria and Maggie worked chaining up the limbed trees, and dragging them to the splitter with the ATV. Bret's sons helped carrying the limbs to the different burn piles.

By dark, everyone was exhausted, and Maggie went in to make dinner while everyone cleaned up. Bret came out with a 6-pack of beer, and Brad had 3 of them by himself. Bret remembered that Brad used to drink beer like water, which explained his 6-foot 300-pound body. He had a beer gut on him, but he was as strong as an ox. When they finished the beers, Brad said he had to go home and work on his hydroponic system. He drove his old pickup down the road, and was out of sight within a minute. Jim talked to Bret, and they all pitched in pitching Jim and Gloria's tent out front. Bret loaned him a shotgun with a light attachment to keep in the tent with them because Gloria was nervous around the "Assault Rifles" so Bret kept them in the

house.

Right after breakfast the next morning, Brad showed up, and they quickly sawed the logs to length, and Brad showed Bret how to operate the splitter. It had a small engine powering a heavy duty hydraulic pump, and a 3" ram with a 2-foot throw. At the end of the ram was a spike with 4 splitting wedges to divide the wood into 4 pieces. The operating valve either sent fluid to the ram, or bled the ram. A large return spring helped the ram to retract quickly so it only took less than a minute to split an 8" log that was less than 2 feet long into 4 pieces. The baseplate was self-centering, so any size log would be centered on the spike as it came down the ramp. Bret cut the wood to length, Brad split it, and everyone else either fed the splitter or stacked the wood. They filled Brad's pickup first, then loaded Bret's Dodge to drive it over to his wood shed. Bret switched saws halfway through when his blade got dull, and Jim stopped loading wood long enough to sharpen it, then handed Bret his saw back, and sharpened Brad's. By the end of the day they had cut all the wood to length, and split it. There was a huge stack of split wood waiting to be loaded into Bret's truck. Bret asked Brad if he wanted any more of it, and Brad said his woodshed would be full if he put up what he had, and he really didn't have room for anything more, but if Bret couldn't store it, he'd come back and put it somewhere under a tarp. Brad drank 3 more beers after they got cleaned up while Maggie made dinner. Bret finally had to ask him how he could drink 3 beers and drive like Bret did when he was stone cold sober.

"I drank so much when I rode with the Sons of Satan that I developed a tolerance for alcohol. Most of us drove drunk, stoned, and high all at the same time - we didn't care. Now that I gave my life to Christ, I don't drive drunk anymore. That's how I lost Annie."

"You were married?"

"Sort of, we never went before no preacher, but we always stood back to back when the chips were down. One day I was driving home from a ride with Annie on the back, hit a rock and started a high-speed wobble. I could have recovered if I were sober, but I didn't. We crashed, I spent 6 months in the hospital, and a year in Prison, and Annie wound up dead. I met someone from the Prison Ministry when someone told them I was suicidal, and after spending 6 months talking with me, I gave my life to Christ, and realized he had forgiven me of everything I did. After that, I promised never to get drunk again, and that was almost 10 years ago."

"So why didn't you get remarried?"

"Never wanted to I guess I'm still mourning Annie."

"Ok, bro, if you need some company, just give me a yell."

When Brad gave him a bear hug, he thought he was going to break a rib. Finally he let go

when Brad pounded on his arm. Brad waved goodbye, got in his truck, and drove home.

Brad called the next day, and Bret took several bags full of fry, half of his remaining hydroponic media, 8 hydroponic trays, and a year's worth of non-hybrid seeds in case Brad didn't have any. When he got there, Brad had the Tilapia tanks full of 80 degree water and had a huge aerator pump with a 4- way distribution panel to keep the water aerated. He had 8 horse troughs on blocks in a stair-step pattern just like Bret had told him. Brad had already cut some 1" reinforced plastic hose into 1' lengths and had clipped them between tanks to make sure the siphon action worked. Once he had everything installed and running, and the water temperature in the Tilapia tanks stable, he called Bret, who helped him get the Tilapia fry adjusted to their new home, and gave Brad detailed instructions about their feeding and care. With the Tilapia set up, they moved to the Hydroponic system. They filled the hydroponic trays with the media, immersed them in the tanks, and set bricks underneath them to hold them at the right level above the hydroponic solution. 6 trays were shallow, and 2 were deep for root vegetables like carrots, etc. Bret showed him how to plant, which was much closer than normal, since there would be no weeds, and no need for watering the plants, so he could plant them as close as he could without crowding them. By the end of the afternoon, they were almost finished. Bret went out to his truck, and removed a gallon of very smelly fish emulsion and showed Brad how to set it up for a slow drip to feed the plants until the fish took over. Brad laughed and said "I guess I never imagined eating fish poop!"

"You're not eating it - the plants are. If you're going to run this year-round, you'll need to install banks of mixed warm and cool florescent lights with a good height adjustment to keep it close to the plants."

"Already got them laying over in the corner. I've got 2 spare cases of 48-inch bulbs, 4 spare fixtures, and 8 spare ballasts. I copied your AE system when I met you years ago, so I've got plenty of power."

"Want some help setting them up?

"No thanks, I've got to run power, and a mounting bracket over the tanks to make sure they stay put, but I can raise and lower the lights."

"Do what we did - put the fixtures on 2 6-foot lightweight chains. Drive a heavy nail into the crosspiece above it, and hang the chain from the nail so you can move it up and down easily. That way all you need is a 2x4 about 6 feet high running the length of your tanks. You can even make the support columns out of 2x4's and connect them every 10 feet to the crosspieces."

"That sounds almost exactly like what I was thinking. It will take me a day or so to build the supports, then if you want to help me hang them, I'll give you call on the radio when I'm ready."

That evening after dinner, Bret was listening to his Ham radio, and what he was hearing on the 10-Meter frequencies was not encouraging. Wells Fargo and Merryl Lynch had both declared Force Majeure and refused to honor any insurance claims. The next day, the CEO's of both companies died in mysterious car crashes. Two days later, the companies declared bankruptcy and closed. Wells Fargo was also a Major Bank, which started a run on banks that rippled through the stock market, and set off panic selling. The President declared California a Federal Disaster Area, but even the US Government couldn't afford the \$30 Billion in estimated rebuilding costs, and Bret was pretty sure he was looking at the beginning of the end of the US. Later that night when he heard the news updates that China was selling US Treasury notes for whatever they could get for them, he was sure. If his buildings were still standing in a year, he'd be in good shape, since he owned his house outright, and the only things financed in his business was some equipment he was leasing, and some mechanics who were buying tools on credit. He hoped his shops wouldn't get looted, then felt badly for looting the Ralph's store. If Ralph's ever got back in business, and he had the ability to pay, he vowed to make things right with the store manager. He walked back into the living room, and gave everyone the good news. They agreed that the world as they knew it had changed, possibly forever. They sat down at the table to plan what they were going to do to survive if things totally came unglued. Leroy volunteered to work on their security while Maggie and Gloria concentrated on supplies and stuff. That left Bret and Jim with no assigned projects. Even still, they made a list of things they'd like to do to improve things around the compound. Bret was tempted to go on another scavenging run until Leroy talked him out of it - the only thing worth getting was more food and supplies. They had enough tools and equipment, and any gun stores would either already be looted, or the owners would be armed to the teeth and protecting their stores. He called Brad on the radio and asked him if he had any ideas to improved their security. He said "not over the radio - I'll come over there first thing tomorrow and talk to you about it."

The next day, Bret and Brad met out front since Brad didn't want to talk in front of everyone.

"When I was running with the SOS, they were into all kinds of stuff: weapons, explosives, drugs, you name it. Anyway, I set aside some stuff for a rainy day that we can put together to defend both our compounds from any Mutant Zombie Bikers."

[&]quot;Don't you resemble that remark?"

[&]quot;Not any more, I may be a Biker, but I'm not a Mutant Zombie anymore!"

[&]quot;Ok, let's go over to your place and you can show me what you've got. Any problem bringing Leroy, he was a gunny in Uncle Sam's Misguided Children, and might have some ideas."

[&]quot;Sure as long as you trust him with our lives - what I'll show you can get us all sent up the river for at least 20 years."

"Leroy's my Shop manager, I've known him 10 years, and he's a Christian Brother as well."

"In that case, the more the merrier!" They loaded up, and Leroy rode with Bret in Babe. He didn't get too many chances to drive Babe anymore, so Bret drove Babe whenever he got a chance. 15 minutes later, they were at Brad's place. They hiked to a far corner of his lot, and Brad cleared some debris that was covering a hidden door into the hillside, and pressed several buttons, and the door swung open by itself. "Welcome to my Lair" said Brad in a lame Boris Karloff impersonation. When they were inside, Bret was amazed by what he saw, and Leroy felt like he was back in the Corps. 1 wall was lined with M -16/M -203 combinations, and the other side had several AK-47's, a bunch of suppressed H&K MP-5SD3's and MAC-10's, and several cases of 9mm ammo for them. The other wall had wooden boxes with numbers stenciled on them, Leroy recognized several of the numbers, and said "You guys could stop a Regiment of Marines with this stuff!"

"That's the whole idea - except we're more worried about Mutant Zombie Bikers than the Marines."

"It would work even better for them. Brad's got Claymores, Bouncing Betties, anti-vehicle mines, and enough C-4 and det cord to blow us sky high! If we got these located properly, we could stop anyone from coming up the fire road we didn't want to, and we could circle our compounds with a minefield, and an inner ring of Claymores if they got past that."

"What do you have in mind?"

"I'd set a command-detonated vehicle mine in the fire road, backed up by claymores, then a ring of bouncing betties in a Spider's web configuration around our compounds, and an inner ring of claymores. Each of those boxes has 12 claymores, and you've got 6 of them. I'm willing to bet there's 4 bouncing betties in each of those other 10 boxes too. Those smaller boxes look like detonators for the Claymores. I hope you've got the FM for the Betty, since it's been years since I've played with one, and they're pretty touchy once they're set..

Brad pointed to a box in the corner, with several manuals in it. He told Leroy and there was 1 copy of each manual for each weapon in the bunker in that box. Then Brad pointed in a corner, and said "Those are Russian TM-62 Anti-tank mines - I wouldn't use them unless it was a last resort."

"Why not?"

"They're just as likely to take one of our vehicles out by accident as take out an intruder. They're powerful, and designed to destroy a tank by blast, instead of just knocking off a tread."

"I think we'll skip those for now - we can lay rows of Claymores on both sides of the road and

catch any intruder in a cross-fire. Since they're command detonated, they're much safer. Now all we need to figure out is how to remote detonate them safely, and when WE want them to detonate. Leroy, that's your department."

"Gee Thanks Boss!"

For the next two weeks, everyone helped Leroy dig holes to emplace the Claymores and bouncing Betties. Leroy actually emplaced the mines, since that was the dangerous part. While he was working on that he asked Bret and Brad if they had any spare handy talkies or anything they could use to remotely detonate the mines. Neither of them had anything remotely useful, and Leroy didn't know how to set up a single radio to detonate more than 1 group of mines. He knew it was possible, he just didn't have the electronics knowledge necessary to do it. Both Bret and Brad were hams, but their knowledge of electronics was limited too. Once they were in place, Leroy left them alone, hoping they'd solve the remote detonation problem later.

Chapter 5

The next day, Bret checked the Yellow Pages, and sure enough, there was a Radio Shack on Verdugo Blvd, just east of the 2 freeway by the hospital. He called Brad, who said they carried all kinds of radio gear, and if they could get some of it, that would solve their problems. Bret thanked him, and said he'd get back to him.

"Leroy, I found a solution to our problem, but it involves another scavenging trip. There's a Radio Shack right at 2027 Verdugo Blvd, just east of the 2 freeway. That would only take an hour or so to drive over there, get what we need and get back here."

"What were you looking for?"

Radios - you needed radios to set up the remote detonating claymores. With a bunch of FRS/GMRS, or business radios, you could do it easily."

"I wouldn't say easily, but if we had a bunch of radios, it would make it much easier."

"Let me talk to Maggie - I want to get her permission before we decide to do this."

Maggie wasn't too happy, but realized that the risk was necessary when he explained that without the radio detonators, the claymores required someone to stay with them 24/7 to be effective. With a radio detonator, either he or Brad could detonate the mines from a safe distance, and possibly inside their shelter.

The next morning, Bret and Leroy drove Babe towing his pickup bed trailer to the Radio shack without incident. They took every radio, and all the batteries they had for them, then Leroy said they needed a relay and a deep-cycle battery to power the detonators, since the radios didn't have enough power by themselves. Bret was scratching his head, but there on the shelf were 24 12vdc SPST relays, and Leroy found 2 12vdc 80Ah deep-cycle VRLA Marine batteries in back on a charger, in Marine battery cases. After he put the batteries and the charger in the trailer, Leroy took a complete set of tools and parts including a couple soldering guns, multimeters, a bunch of tools, 2 small solar panels, tape, solder, etc, and threw it in a box. Before they left, Bret told Leroy to take whatever they could use, no matter how trivial, so they cleaned out the store and loaded the rest of the trailer full of stuff from the Radio Shack. They drove back to Brad's house, and he told them he might be able to rig up something using the parts to remotely detonate the Claymores. He gave Bret 16 of the Motorola FRS/GMRS radios with chargers and spare batteries so they could talk to each other. Since they had over 60 of them, Brad had more than enough for any project they could think of, and they wouldn't be missed.

2 days later Brad called, and suggested that Bret and Leroy come over and inspect his work. When they arrived, Brad had modified 2 of the FRS/GMRS radios so they could transmit at full power on all frequencies and programmed a different privacy tone for each frequency. He locked each of the receive radios onto a different single frequency, and wrote the frequency and tone on a sheet of paper. He connected the speaker leads from each radio to a relay, which would close the circuit between the marine 12vdc battery and the detonators, sending enough voltage and current to the electrical detonators to fire the claymores. Brad showed them the setup, and connected the multimeter to the power leads coming off the relay. Even after several hundred feet, the voltage was still over 12vdc. Since it only had to work once, they weren't worried about how much voltage and current made it to the detonators, since it was way more than the battery-powered clacker it came with provided. Once they verified all circuits were working, Brad installed a safety switch between the relays and the battery so they could replace the batteries, and test the circuits without detonating the claymores. He checked it again, and everything was working perfectly. Finally he connected a small solar panel with a blocking diode to the battery to keep it charged. Since it was less than 3 miles from Bret's place to where the Claymores were installed, either of them could detonate the claymores. Brad said "Just to be on the safe side, before you blow the claymores, contact me on the 2-meter just to be sure I'm not on the road. Also, we should both make a habit of calling when we reach the road when we're coming home."

"Good idea, I don't want to blow you up by mistake!"

"I'm closer to the claymores, so I'll check the batteries once a week. I'll make sure I call you and let you know."

"We might want to develop a code, in case someone else is listening, then all they need to do is wait for you to take the claymores off line to replace the batteries in the radios, and come charging in here unopposed."

A week later, Brad called to say the claymores were in, and he had installed an infrared beam at the start of the fire road to give him plenty of warning about someone coming up the fire road so he could get to the detonators in time to catch any invaders in a cross-fire. Bret suggested that if things got rough, they should either drop some trees in the road, or rig them to blow remotely like the claymores, and catch any invaders in a kill box. Brad said they should do both, and rig some trees to blow now, and mark some others to drop later. He'd take care of that tomorrow. Bret assured him they wouldn't be going anywhere anytime soon, except maybe to his place, since they had all the supplies they needed, and it was too risky to go out anymore and scavenge.

Over the last couple of weeks, things in the US had gone from bad to worse. Once the banks started closing, the rioting wasn't far behind. California experienced little rioting, since they had already looted and burned everything worth looting, and were now trying to survive from

day to day. Finding clean water was now their highest priority. Without electricity, the pumping stations didn't work, so people started camping around the reservoirs. Several clueless people managed to contaminate several reservoirs with human waste when they put their latrines too close to the water, and made several hundred people sick with Cholera and Typhoid. There were several incidents where survivors were shooting people who weren't careful with how they treated the reservoirs after that happened. The entrance to each reservoir was now posted with a set of rules including no swimming or bathing in the reservoir, and to keep latrines over 200 feet back from the water, and on the other side of the containment area so when it rained, the waste couldn't flow into the water. Several lakes were patrolled by armed Rangers and Sheriff's deputies and reservists using bass boats, but they had a limited supply of fuel and ammo.

Bret and Brad's immediate area survived the quakes amazingly well, but everything west of them was leveled and either burning or smoldering. With the houses so close together in Los Angeles County, a house fire quickly spread to the rest of the subdivision when there wasn't sufficient water pressure to fight fires. The National Guard combed subdivisions looking for survivors willing to stay in shelters who didn't have transportation to get there. Sadly, 2/3 of LA County was totally dependent on City and State services for their daily needs, and the busses were packed for the next couple of months. Football and baseball fields, even city parks were converted to tent cities for the refugees, who got 1 1,000 calorie meal per day- usually an MRE, and a liter of water to drink per day unless they were working, then they got 2 MREs and a gallon of water each. The sick and injured were moved to other shelters. The work details usually involved either setting up more tents and shelters, or demolition/reconstruction of buildings suitable for future shelters. In Central California, once the refugees were rounded up, they started farming what little land that was still suitable for farming because Arnold got word from Washington that once the stored MRE's and food were gone, that would be it. The unrest had shut down the freeways and railroads, and no one could afford to buy food, so the manufacturers stopped their plants and laid off the workers, making a bad situation worse.

Financially, the US was Broke, and couldn't afford to pay it's bills. Naturally, the rest of the World tried to collect, until President Bush told them that we had plenty of nukes, and weren't afraid to use them on the first country that invaded the US. The European and Chinese bankers bitched and moaned, but their governments realized President Bush was serious, and wouldn't risk a nuclear war for some businessman's losses. The world governments weren't in much better shape than the US, as soon as the US markets dried up, the Chinese had no one to sell to, and the European tourism market dried up overnight. Food shipments to the 3rd world stopped, and aid payments to dictators stopped for the first time. The entire world was in a downward spiral, and no one knew where the bottom was.

Chapter 6

The next morning Bret heard a familiar voice on the CB radio "Breaker 1- 9, this is the Bear, is the Goose There?"

Bret laughed and picked up the microphone "10-4 good buddy, this is the Goose, where are you?"

"Bout 2 miles from your place, we could use some help!"

"Be there in 15, Goose out!"

Maggie was wondering what was so funny, so Bret gave her the good news, his college buddy Bear was at the start of the fire road, and wanted some help getting to his place. Maggie hugged Bret and said "Well, what are you waiting for. Bring Leroy to ride shotgun just in case."

"Ok, I'll see you in a while. Leroy, let's go, I've got a friend I think you'd like to meet."

They drove to the end of the fire road and could see why Bear wanted help. He was pulling a huge 5th wheel with a Dodge diesel like Bret's. After Bear gave him a bear hug, Bret hooked his towing strap to the towing hook at the front of Bear's rig, and helped him up the fire road with Babe. When they finally stopped, everyone piled out of Bear's truck. Bear gave Bret another bear hug, then they all went inside to catch up. Once everyone was seated, and had their beverage of choice, Bear got them up to speed with their story.

"We were vacationing at Big Bear Lake when the earthquakes struck. God must have been watching out for us, because we'd be dead if we were at home when this quake hit. We just bought a new house in Seal Beach that's probably somewhere in the Pacific by now. We heard on the radio that tsunamis had flooded or destroyed most of the coast from Mexico to San Fran. I just got that new job working at Long Beach as a Crane Operator, so if I were at work, I'd be dead too- except I might have seen it coming! Once the ground stopped shaking, a Deputy made the rounds to check on everyone, and asked for volunteers to help search for survivors and clear the roads. I volunteered knowing Nancy and the girls would be OK on their own at the park we were staying at, especially since Nancy was an expert with my Mossberg 590. It took until yesterday to get the roads cleared, and that was after the deputy commandeered a huge bulldozer that was working in the area. Once the roads were clear, the deputy told us the USGS said the area wasn't safe due to increased activity in and around the lava dome, and we should evacuate to the west if possible. Praise God we filled our diesel tanks right when we got to Big Bear, because no one had any fuel for sale between here and there. The deputy told us to stay off the freeways because all the bridges were down, so I took out the map and plotted

a route taking all the back roads to get here, and we just made it a little while ago. We were hoping to stay with you guys. You know I'm a gun nut and a prepper, so we have over a year's worth of food for the 4 of us with us, plus 2 AR-15's for the girls, and 2 FAL's for Nancy and me. If we could hook into your septic system, and maybe get some water and a 220 connection, we're in business."

"Forget it Bear, No way Jose! Pack your bags and get!"

Bear stood there stunned until he realized that Bret was kidding him, then walked over and gave him his trademark bear hug. Then he did his "Three Stooges" impersonation, grabbed him in a headlock, and started giving him an Indian Rub saying "Wiseguy, huh?" After a minute, he let Bret go, and it was like old times. Later that afternoon, they got Bear's trailer leveled, connected his black water pipe to the septic system, connected his water system to an outside hose bib, and ran an extension cord from a 220 outlet to their power connection. Meanwhile the kids were getting acquainted. Bret's 15 year-old son Allen immediately hit it off with Veronica, who was a foxy blonde-haired blue-eyed 16-year old, who had just spent the summer at the beach, and had a killer tan. She realized her surfer boyfriend was probably dead, and it was either Allen, or take her chances later. She thought he was funny and kind of cute, so she decided to give it a try. 13 year-old Jeremy paired up with 14 year-old Natalie, who wanted to be just like her big sister. Later that afternoon, Bret and Bear got together for a beer, and had a talk about the kids.

"Seems like your daughters and my sons are hitting it off pretty well."

"Should we encourage or discourage them?"

"Bear, judging by what I heard on the radio and TV, it sounds like the world as we knew it has come to an end. We're soon going to be in pure survival mode, and your daughters won't be able to travel far to seek out husbands."

"You're right, they could do a lot worse. I know Veronica was having sex with Chad, since I had to sign the permission slip to put her on the pill. She asked me to sign because she knew her mom would freak out."

"That's awfully open-minded of you - why didn't you just say No?"

"She told me they were going to have sex anyway, and Chad didn't want to use a condom, so I decided that I'd do what I could to keep her from getting pregnant. I'm pretty sure she'll put a move on Allen within the week."

"Ok, let's see what happens, and if it looks serious, let's talk to them together. If it's love, I'd encourage it, but if it's just sex, I'm pretty sure Allen's still a virgin, and I would have liked

him to stay that way until he was married."

"I wanted Veronica to stay a Virgin until she was married, but casual sex is so rampant in her High School that I was up against unrelenting peer pressure, so I caved. Hopefully Natalie's still a virgin, her Junior High was more conservative, and kept the extracurricular activities down to a minimum with their dress code. Frankly I was shocked by what Veronica wore to school sometimes, and I was amazed that her clothes managed to stay on. Luckily, all Nancy let her bring was jeans and tee shirts that actually covered her belt line. She managed to sneak in a skimpy bikini, but she's only worn it once."

Later that evening, Maggie asked Bret how they got their nicknames. Bear started laughing, then explained that they met on the basketball court, when they were paired up as a 2-man team for a 2-on-2 half-court basketball tournament. One of the opposing players gave Bear his nickname, because he was so big, he blocked the lane like a big grumpy bear. He said that he gave Bret his nickname later when he saw him going up for a lay-up, flapping his elbows like a Goose trying to take off. Later that night, Bret explained that Bear didn't like to be called by his real name, Herbert, because it was his grandpa's middle name, and he was verbally abusive to Bear every time he'd come over. He said he didn't cry much at his grandpa's funeral.

Bear had underestimated his daughter, who was already putting moves on Allen by the end of the week. While Allen enjoyed kissing her, he wasn't ready for sex just yet, and told her to cool it a little. Bear caught Veronica giving Allen a French kiss and a butt grope in the hall, and decided that he'd better talk to Bret again. 2 days later, they sat down with Veronica and Allen, and explained the facts of life to them.

"Veronica, we've been watching you two, and wanted to explain several things to you. One - you're both old enough to get married. Two - once you run out of pills, there's no more birth control, and you could easily wind up parents. Three - we have no objections to you two getting married if you're serious about each other, but if it's just sex, we'd prefer you both wait. Four - if you do get married and have kids, things are going to be rough for you. There's no doctors anywhere, we don't have much for medical supplies, and things are going to get worse instead of better, and life as we knew it may never return. With that in mind, if you want to continue this and get married, we need to talk to your moms about sleeping arrangements, etc. If you're not ready, we both want you to limit yourselves to hand holding and kissing - No butt grabbing Veronica!"

Veronica turned beet red, she didn't know her dad had seen her kissing Allen. Allen spoke up, and said he wasn't ready to marry Veronica, but he really liked her. Veronica was disappointed because she was ready for a sexual relationship. She decided to cool it, and see if she could win him over. With that settled, they went out on the porch and sat on the swing to talk.

Bret and Bear breathed a huge sigh of relief, then Bear said "You know we're just delaying the

inevitable here - eventually Veronica will wear Allen down, and they'll be having sex."

"I know, but at this point, that's one less thing I have to worry about right now."

"Agreed, let's not bring this up to our wives unless they bring it up first."

Veronica and Allen were on the porch swing cuddling with Allen's arm around her shoulder. Veronica laid her head into Allen's shoulder and relaxed. Deep down, she really wanted to be held and loved. She remembered it was Chad who wanted to have sex, and she went along with it because he was a popular senior, and was a good enough surfer to maybe go pro in a few years. Laying there holding Allen, she realized she didn't love Chad, and that he was just using her because she had a stunning body, and she was young and naive. For some reason she felt safe and secure in Allen's arms. Later that evening, she realized that if she slowed down and let Allen warm up to her physically when he was ready, that she might be better off. Maggie came out at 10 o'clock and told Allen it was time for bed. He stood up, gave Veronica a hug and a kiss, and told her he'd see her tomorrow, and thanks for holding him. She smiled, and gave him a sweet kiss instead of trying to give him a tonsillectomy. Allen's gentle hug told her he appreciated it, then Maggie coughed discretely, and they went their separate ways.

Veronica took a shower, got into her nightgown, and climbed into the lower bunk bed in their 5th wheel. Her sister asked for a after-action report, and Veronica told her everything. Natalie told Veronica that she wanted to tear Jeremy's clothes off. Veronica told her little sister to cool her jets, sex wasn't all it was cracked up to be, and told her about her relationship with Chad, and how in retrospect, she wished she hadn't given in, since she felt used. She told Natalie that holding Allen was much more satisfying than sex with Chad. Natalie laughed at her older sister, saying "everyone's doing it!"

"That's what I thought too - then I realized that it was more talk than action. Besides, what do I look like - a Lemming?"

"What are you talking about?"

"Lemmings are rodents who run in a massive pack over a cliff into the sea when there's too many of them. It's not in the individual lemming's best interest to follow the pack, but they are overcome by the momentum of the pack, and get swept over the cliff whether they want to or not. If I knew then what I know now, I never would have had sex with Chad. You're still a virgin, and I'd highly recommend staying one until you're married. You and Jeremy make a cute couple, but he's only 13. He's got a couple of years before he's ready for marriage, and you're still 14. Do yourself a favor, go slow, and be Jeremy's friend first. Later when the time comes, you can be his wife if you want."

"Thanks Sis, goodnight!"

Veronica rolled over and went to sleep, dreaming of Allen.

Chapter 7

The next morning, Brad's driveway alarm woke him with 3 buzzes, then he heard the roar of straight-piped Harleys coming up the fire road. He called Bret to tell him, and he said he'd heard, and it only sounded like 3 bikes. They should get everyone inside just in case, and he'd act as the Welcoming Committee. Bret banged on Bear's door, and told him to get everyone in their house ASAP, and bring their weapons. He yelled at Jim in his tent to do likewise, then ran back to the house to make sure everyone was awake and dressed.

Meanwhile Brad drove his truck out to the intersection of his driveway and the fire road and blocked the fire road with his truck. He picked up his AK-47 with a 75-rd drum magazine already loaded, and put the engine block of the truck between him and the fire road and waited. Less than a minute later, 3 choppers came into view, and he thought he recognized the lead rider, Motorhead, who was Sonny's lieutenant. Sonny was the leader of the local chapter of the Sons Of Satan bike gang, so if he sent Motorhead out, it was important, and official business. Brad relaxed a little. They stopped 20 feet from his front bumper, shut down, and dismounted.

"Easy there Moose, we don't want any trouble. I came here at Sonny's request to offer you back your colors - things are going to hell and we need all the brothers to defend the club."

"Sorry you had to come all this way for nothing Motorhead. I quit and I can't take the colors back, even to save my own life. I gave my life to Christ in Prison, and promised Jesus and Annie I'd never go back to that life. You remember Annie and I got in that wreck? Once I got out of the hospital, they charged me with Vehicular Manslaughter for Annie's death because she died while I was driving drunk. The judge sentenced me to 10 years in the pen. I met a preacher from Prison Ministries when I was in solitary on suicide watch, and over the next 6 months of talking to him, he convinced me I had an alternative to killing myself - I could give my life to Christ, and spend the rest of my life trying to serve others like Jesus did. The Judge made me promise to have no further contact with any biker gangs as a condition of parole."

"Ok, Sonny was afraid you were serious. One last thing, there's a bunch of rival gangs and renegades looting and pillaging in the area west of you - keep your head down and your powder dry. Nice setup you have here, I see you put those Claymores to good use!"

"You spotted them?"

"You set them too close to the road, and they're not well camouflaged. Either move them back, or cover them with debris, they'll work fine even with leaves and twigs covering them."

"Anything else I should do different?"

"If you've got some land mines, use them to protect the fringes of the fire road from people on foot. Also, you might want to block the fire road from here on out with some trees to slow anyone else down."

"Thanks Motorhead - you guys need some gas? I've got a 5-gallon can in the bed - that's about all I can spare, I need the rest for the generator."

"Thanks Moose, we could use the gas. We'll fill up and be on our way."

Motorhead took the can out of the bed, filled the 3 bikes as full as he could get them, then secured the can, put it in the bed of Brad's truck, then turned to give Moose a hug.

"So long Moose, too bad about Annie. Hope I see you again."

"Me too Motorhead. I'd highly suggest calling first from now on, so I know it's you. I've got a ham radio and a CB, and I'm sure Sonny knows which channels I'm on."

"Thanks Moose - see you later."

They climbed back on their bikes, kick started them, and rode back down the fire road. Brad grabbed his Mobile Radio and said "All Clear, they're gone, just some friends visiting. He did say the next group might not be so friendly, so I need to talk to you face to face."

"Ok, Come on Up."

Brad drove up the fire road to Bret's place, who greeted him with his shotgun at port arms.

"Expecting Trouble?"

"Just wanted to make sure you didn't make that last transmission under duress."

"We need to work out some codes. Motorhead is Sonny's lieutenant, and he offered me my colors back. I turned him down, and he warned me that some rival gangs and renegades were looting and pillaging west of here, so the next visitors might not be friendly. He highly suggested blocking the fire road, and doing a better job camouflaging those claymores. He told me to add some land mines to protect the fringes of the fire road from anyone on foot, and I'm going to plant that Russian Anti-tank mine since it's not safe to go anywhere anyway."

"I'd get Leroy's help with that, he might have some suggestions."

"Works for me - I don't really know how to set the damn thing anyway!"

"Excuse me, I'll be right back with Leroy." Bret walked into the house, and came back with Leroy. They talked for a while, and he agreed to look at Brad's setup, and help him plant some Bouncing Betties to cover the paths around the fire road, and help him set that big Russian antitank mine. They agreed that dropping 2 trees across the road would be enough to slow anyone coming in down, but not stop them from getting out quick in an emergency. They also decided to wire the two trees Brad had marked to blow and catch anyone trying to get to them in their Claymore kill box. Leroy asked Brad if they had any more claymores. He said he had another whole box stashed in another bunker, and Leroy asked if he could use them to back up the first set of Claymores, in case they needed two sets to get a big group that might send a large scouting force through first, then the main body later. If they fired their claymores, they'd take out the scouting force, and have nothing for the follow-on forces. Brad was glad that they had more radios than they needed. He was going to be busy fixing them to work as remote detonators. Before he left, Bret invited Brad and Leroy back in to discuss the security measures with everyone, since they were all assembled.

Once they were all seated in the living room, Brad told them about his meeting. "Ok, everyone, those bikers you heard were friends of mine who belong to the Sons of Satan motorcycle gang. They were here to ask me to re-join the gang. I turned them down, and they warned me of several renegades and rival gangs who were looting and pillaging west of us. I'd highly suggest we stay on low alert from here on out, drop a couple of trees across the fire road to slow anyone down, and we're going to set some land mines along the fire road, and a Russian Anti-tank mine in the middle of the road. Everyone needs to stay clear of the fire road. Once the anti-tank mine is armed, it's difficult and very dangerous to disarm it. From what they said, it's not safe to leave here anyway, so we're going to make it difficult as possible for anyone to get to us."

Leroy spoke up. "Ok, Alert means EVERYONE goes armed outside from here on out. At least a pistol and 2 spare magazines, 4 would be better. Bret already has a neat E&E kit made up with a pistol belt, butt pack, canteen, knife, and a P-14 with 2 spare mags. I'd suggest adding a 2-mag carrier if you have room on your belt Bret. If you run out of ammo, that \$600 pistol will become a \$600 club."

"I've got enough kits made up for my family, and some extras in case any of you don't have a fanny pack or E&E kit already made up. Leroy's right, we need to be armed when we're outside from here on out. Also, there's a ring of Claymores and bouncing Betties protecting the perimeter, so check with me, and I'll show you where everything is. There's just a few safe lanes through the mines to get to the perimeter, and they're NOT marked for obvious reasons. Any questions?'

Jim spoke up "By everyone, I'm assuming you're including Gloria and me. She's not into guns, and I don't think I could get her to carry."

Bret locked eyes with Gloria, and lowered the boom on her.

"I took you and Jim in here with the understanding that you would pull your own weight. That includes defending the compound and yourself from attack. I don't care WHAT you think about guns, you WILL carry and learn to shoot, or both of you are out of here right now!

Gloria started crying as the last walls of her invulnerability crumbled. Jim held her, then Bret took them outside and explained the facts of life to them.

"Jim, I'm sure your dad told you what happens in a war. What's going on outside this compound is way worse! There's no Geneva Convention, or any other higher authority to appeal to. I can guarantee that if Gloria gets captured alive, she'll be raped and tortured before they kill her, either for the fun of it, or to get information about the compound. I'm sure Bear already gave his daughters this same lecture, or will shortly. Gloria, I'm sorry, but this is literally the end of the world as we knew it. I heard on the radio a couple of nights ago that the federal government is bankrupt and the economy has fallen apart. That means little or no outside help, and we are on our own. Whether we live or die is up to us and God."

Bret went back inside to let Jim and Gloria talk. He prayed that Jim could get Gloria to listen to reason, he'd hate to lose the two of them. He couldn't send Gloria out by herself in good conscience, but he could send both of them out if he had to.

Bret went back inside and talked to Bear "I hope you already told your daughters the facts of life. I don't want to have to break the news to them about what could happen to them or your wife if they were captured."

"I told them a while ago, but I'll reinforce the lesson in our trailer tonight. We've got 4 Kimber 45's and 4 spare mags for each. Can I get a look at your E&E kit to make sure mine's up to snuff?"

"They're basically what we discussed 2 years ago. I sent you the list as an e-mail."

"Ok, then we're good to go. I even got those SAS drop holsters you recommended, except we put Cold Steel Recon Tantos on the belt instead of the Kukhris."

"Ok, those will work fine. I'd make sure you're carrying 4 spare mags each. I'm going to add a second double-mag carrier to each of my kits."

10 minutes later, Jim came in "Bret, I explained things to Gloria. She used to be what you'd call a Sheeple, but she's willing to learn, and carry. I could use some refresher too - is there anywhere we can safely shoot around here without drawing attention to ourselves?"

"There's an abandoned quarry a mile or two up the road that everyone used to go shooting at until the state closed it. They're used to hearing gunfire around there. I'll see if we can get everyone together and go shooting this afternoon."

"We don't have any pistols - you saw everything I owned at the Hospital."

"I've got some Glock 21's in the safe, and several spare E&E kits in case we took someone in. I'll go get them for you, and we'll be ready to go."

5 minutes later, Bret came back with 2 E&E kits with a .45acp Glock Model 21 in a Safariland SAS drop holster, and 2 double-mag spare magazine carriers. He told Jim they bought the Glocks because he realized anyone they might take in wouldn't be proficient with guns thanks to California's draconian anti-gun laws, and the Glock was the easiest pistol to teach new shooters how to shoot. With the 13-round magazine, it gave them 14 rounds on tap with the chamber loaded.

"Isn't it kind of dangerous to have the chamber loaded?"

"Not really if you obey Rule #1 and keep your finger off the trigger until the sights are on the target."

"Ok. If everyone's good to go, let's get loaded and head over there."

They loaded Bret's and Bear's Dodge crew-cab Ramchargers and Jim's Jeep full of people, and drove up the fire road to the quarry. While Allen and Jeremy unloaded the cased guns from the bed, Bret and Bear set up the targets. They decided to use B-27 body silhouettes for all the targets. Bret had never seen a round target that shot back. Once the targets were on their stands, Bret added a 1" orange sticker to the forehead, and a 4" one to the heart-lung region. They had a dozen targets set up, while Allen and Jeremy were setting up the shooting lanes. 6 were for pistols at 10-25 yards, and the rest were rifle targets at 100-300 yards. By the time Bret got back to the shooting line, they were ready to go. He gave everyone the "new shooter" lecture at once to save time, then his boys, Maggie and Nancy went to the rifle range with their AR-15's and started shooting once everyone had their eye and ear protection on. Bret took everyone else to the pistol range, and decided to work with Gloria, since she was the least experienced shooter. Leroy worked with Jim, and Bear was on his own, shooting at the far 25-yard target.

Before Bret started, he apologized for reading Gloria the riot act.

"It's Ok Bret, Jim explained things to me. Up to that point, I was still hoping things would quickly get back to normal. My life revolved around school and working at the Galleria. Jim told me the Galleria is probably a smoking ruin by now, and the school would quickly either be

abandoned or overrun by MBZ's who wanted to kidnap the women. He told me in very graphic terms what would happen to me if we got caught. Frankly he scared the crap out of me. IS what he said true?"

"Gloria, if anything, he sugar coated it. I can't begin to tell you the depths of depravity some of these monsters are capable of. From what I've heard and read, you'd be better off if they just shot you outright."

"Thanks Bret - now I'm really scared!"

"Gloria, as long as you have a gun on you, there's nothing to be scared of. All I can say is save the last round for yourself."

"What do you mean?"

"I've told Maggie the same thing - if you're dead, they can't hurt you. If you're saved, you're with Jesus in heaven instead of dying a slow painful death. If capture was certain, I told her to stick the barrel of the gun in her mouth, point it towards the roof of her mouth, and pull the trigger, she'd never feel a thing."

"Why not stick the gun up to your head?"

"You might miss. With the barrel in your mouth with the barrel pointing up and back, you're guaranteed to blow your brains out, which is exactly what you want to do in that case."

"OK, I feel so much better!"

Gloria's nervous laughter told Bret that he had gotten through to her.

"Ok, now I'm going to teach you what you need to know to keep that from happening. Let's go up to the firing line. I wanted to start you at 15 feet, which is close enough to guarantee a center of mass hit if you use the sights, and proper technique. Now despite what you've seen in the movies, your gun will only fire once per trigger pull, and I can guarantee that it won't be pointing straight up at the sky if you grip it properly. The recoil is like a soft push with a .45. You're shooting 230 grain practice ammo, and when you're carrying defensive rounds, they're 200 grain jacketed hollow points which will kill anyone not wearing a vest if you do your job, and put the rounds in that big orange circle you see on the target. Later, I'll teach you the best way to shoot a pistol, called the Failure to Stop drill. For now, concentrate on the big circle in the middle of the target's chest. I'm going to have you dry fire until you're comfortable, and sure of where the sights are when the trigger breaks. It doesn't really break, but you'll hear a snap when the firing pin falls when there's no round in the chamber. This Glock has a last-round hold-open device that will keep the slide open if the magazine is empty, but I wouldn't

rely on it. You're better off learning to count rounds. When you get to 14, it's time to reload. After the first mag, it's 13, because the chamber will be empty. Once you slam the magazine home, grab the back of the slide like this, and pull it back slightly, then let it loose so it can fly home, and chamber a round. It's called slingshoting the slide, and it's the best way I know to cycle the slide on a Glock without getting your hand or body anywhere near the muzzle end of the gun. Are you right or left handed?"

Gloria said she was right handed, and Bret decided when he got a good look at her that he better teach her Weaver Stance. Jim was one lucky guy! He showed her the Weaver stance, then had her do it. He avoided touching her as much as possible. Finally she was ready to practice dry firing. He told her how to align the sights, and showed her how to cycle the slide manually so she could dry fire, and explained once the gun was loaded, every time she pulled the trigger, as long as there was ammo in the magazine, the slide should cycle itself, reloading the gun. After about 20 dry fires, he handed her a loaded mag, then stepped back and watched her. She loaded the gun like she'd been doing it all her life, grabbed the back of the slide, and pulled it sharply to the rear and let go. Once she was ready to shoot, she looked at Bret, who gave her a thumbs-up. She raised the Glock from low ready, and once the sights were aligned in the center of the circle, she squeezed the trigger just like she had done before. The gun roared, surprising her. When she looked at the target, there was a hole in the center of the orange sticker in the chest. She grinned, thinking "This is fun!" and proceeded to fire the rest of the magazine into the center of the target. Bret was impressed. Gloria was a natural shooter. He remembered something his shooting coach told him when Maggie outshot him the first time at the range about women being better at the start because they had fewer bad habits to overcome, no ego problems, and listened better. He did say that most men eventually surpass their wives because of their superior upper body strength, but in the beginning, most women outshot their husbands. He looked over at Jim's target, and it looked like someone was firing at it with a shotgun with a bad doughnut problem at 25 yards - no holes in the orange sticker. He hoped Leroy could fix Jim's shooting problems before they had to go home.

Chapter 8

The next morning, Jim looked like something the cat dragged in, and felt worse. He made his way straight to the coffee pot, poured a large mug and sat down. Bret was working on the computer. "Rough night?"

"You don't know the half of it. Gloria was acting like she was on her honeymoon, and I finally begged for mercy around 4 am. I hope we didn't keep anybody up."

"Nope, that's why we pitched your tent where we did. It's on the opposite side of the driveway from Bear's trailer and the house is so well insulated the only way I'd know a bomb went off outside was if it blew in the windows."

"Glad you did - I wonder what got into her?"

"I think we scared her half to death yesterday. She was shooting like Annie Oakley with that pistol, and the last time I saw a woman shoot like that, she was a rape survivor and later admitted she'd put her rapist's face on the target. By the way, you need some more practice - your groups looked like someone had fired a shotgun full of buckshot with a bad doughnut problem from 25 yards. I don't think any of your rounds hit the orange circle."

"It's been about 5 years since I last shot, and Leroy was making me nervous."

"OK, how about I work with you today, and have Leroy teach Gloria how to shoot the AR-15 at the 100-yard target?"

"Works for me. Let me finish this coffee first, then I think we both need a shower."

"Ok, by the time you get out, Maggie will have breakfast ready, then we'll go shooting again."

Just then, Gloria walked in wearing a nightgown and a bathrobe. She walked up to Jim and gave him a rather passionate kiss, even with Bret sitting right there. When she came up for air, Jim headed for the shower. Bret imagined he might need a cold one. Gloria grabbed a mug of coffee and sat down. Bret turned to her and said "I wanted to apologize for scaring you so badly yesterday. While things are really bad elsewhere, we should be fairly safe in the compound, surrounded by the land mines and claymores."

"Bret, I wasn't scared after I started shooting, actually, I felt in control for the first time in my life. I'm sure you saw Jim this morning. For the first time in my life, I felt sexually dominant last night, and I couldn't control myself. I hope we didn't wake anyone up."

"We deliberately set your tent on the opposite side of the driveway from Bear's. No one can hear normal noises, but if you scream, I'm sure Bear will hear you - so I wouldn't scream unless it's an emergency."

"I'm NOT that loud!"

Bret started laughing, mostly from nerves. The only woman that he'd talked that frankly about sex with was Maggie, and they were virgins when they were married. Maggie chose that minute to walk in, much to Bret's relief. He got up and gave Maggie a hug and a kiss, then offered to start breakfast while the girls got caught up. Bret was a really good cook, but rarely did any more since he was so busy between the shop and teaching. This morning, he made a "kitchen sink" omelet, which Maggie liked for 2 reasons: It used up left-overs, and Bret's omelets usually tasted better than hers. While he was chopping, he rehydrated some diced potatoes to make hash browns on the side. When he was finished, the cast iron skillets were good and hot, and he added half the potatoes and a mixture of clarified butter and oil to each. He had a special omelet pan, and while he pre-cooked the ingredients, he reconstituted the dehydrated scrambled egg mix. He took a ladle full of eggs, a teaspoon of the butter/oil blend, added it to the hot pan, and swirled it to coat the bottom of the pan with eggs. Once the eggs were set, he added a small ladle of toppings, then took a plate and slid then flipped the omelet onto the plate, right as Jim walked in. "Perfect timing Jim, grab a fork, breakfast is ready." Bret added a serving of the browned potatoes, and handed it to Jim, then started on the next omelet. Breakfast took longer this way, but Bret preferred to make individual omelets because they usually turned out. Every time he'd tried to make a family-size omelet, it broke. Gloria padded off to take a shower now that Jim was out, so Bret gave the next one to Maggie, then the rest of the crew as they showed up, attracted by the smells of breakfast and coffee. Finally Bret got to eat, and everyone was telling him how great his omelets were.

Once breakfast was finished, the dishes cleaned, and everyone showered, they packed the trucks and headed back to the quarry. This time Gloria worked with Leroy on the rifle range with the AR-15, and Jim worked with Bret on his Glock 21. Bret told Jim that he was going to start at the beginning so he made sure that Jim knew everything, and if he knew what he was saying, he needed to pay attention anyway, just in case. He showed Jim how to operate the Glock, then had him do 10 dry fires while Bret watched his muzzle. Just as he suspected, right as Jim pulled the trigger, his muzzle twitched. He was either anticipating the recoil, or he had a bad flinch. Either way, he knew the cure, and handed him a nickel, and told him to do 10 dry fires in a row without the nickel falling off the slide. Every time it fell off, he had to start over. Finally an hour or two later, Jim told him he made it to 10 without it falling off. Bret stopped shooting, safed his gun, and walked back over to Jim's lane. He handed him a loaded mag, and said to pretend the nickel was still on the slide, and not to squeeze the trigger until the sights were aligned right below the center of the big orange circle. Jim's first round went right through the center, and Bret smiled, and told him to put the rest of the magazine into the center of the circle. Two minutes later, Bret gave Jim a High-five when the magazine locked open

after firing 14 rounds. Bret handed him another mag, and told him to do it again, except this time in the 1" sticker in the middle of the target's forehead. Jim knew it was impossible to fit 14 rounds in that little target, but instantly understood what Bret was trying to do when he remembered a line from Mel Gibson's movie Patriot "Aim Small, Miss Small."

It took longer, but Bret could see that all of Jim's rounds were well-centered, and in a much smaller group than he had just shot at the 4" target. Jim was shooting at the 15-yard target, so Bret decided to ramp up the difficulty level, and get him to double-tap the center target.

"Ok, I'm going to teach you the first half of the Failure to Stop drill. Once you learn it, I want you to always shoot your pistol like that, unless whoever you're shooting at is obviously wearing a vest, then follow G. Gordon Liddy's advice - "Go for head shots!"

Jim started laughing until he realized WHO would obviously be wearing a vest - FEMA, or some other bunch of jack-booted Thugs. Until now, he never really considered the fact that his own government might be just as dangerous to him as a bunch of MZB's. Bret talked him through the double-tap, then showed him how to do it "Just squeeze the trigger as quickly as you can, twice. Start lower on the target if you have to, so both rounds are in that 4-inch circle. Your actual target is much bigger, but if you can put both rounds in a 4" circle at 15 yards, you'll put both rounds into center of mass when someone's shooting back at you." It took Jim the rest of the morning, but finally he was putting both rounds into the circle.

At lunch, everyone took a break for sandwiches and sodas. They were all talking, and Leroy was praising Gloria, who was now able to put most of her rounds in the kill zones at 100 yards standing and prone. She wasn't sniper accurate, but she was also firing an open-sighted AR. Jim shook his head. Two days ago, Gloria wouldn't even pick up a gun, and was forced by the bunch of guys who attacked them at the Hospital to shoot to defend herself. After lunch, Jim joined Gloria on the rifle range, and by the end of the day they both were shooting "minute of dirtbag" out to 200 yards. Leroy asked Bret what he did, and he told Leroy he got Jim to listen. "Well, it worked, Jim's shooting rifle as well as his girlfriend. Too bad you don't have scopes and red dot sights for those AR's!"

"I've got both back home, on QD mounts, so we can switch from day to night. I got a deal on some Simmons 3x12x50 AO scopes from my gun dealer, and bought the rest of his stock. I've got a laser boresighter, so we can get them boresighted and shooting scopes if you think it's worth it."

"I think they both could hit a man-sized target at 300 yards with a good scope as long as they can shoot prone. Let's get the scopes mounted and boresighted, and come back here tomorrow."

They packed everything up, and headed home. After dinner, Jim and Gloria said goodnight, and Allen and Veronica asked to be excused. He told his dad they'd be right out on the porch swing if they needed him. The two of them sat down and snuggled up, and spent the rest of the evening talking. Everyone was surprised how quiet it was in Jim's tent.

The next morning Jim looked much better than yesterday, and told Bret that they spent the night in each other's arms, instead of having wild sex. Bret commented that he thought it was awfully quiet in their tent. Jim asked if he knew of anyone who could marry them. Bret said "I don't know, let me ask Brad if he knows anyone." He reached for the radio, called Brad and asked him "Do you know any ordained ministers? Jim and Gloria wanted to get married."

"Bret, I'm ordained. It's a mail-order ordination, but it's legal. I'll be over there in about half an hour to talk to everyone."

Half an hour Brad showed up. Bret almost didn't recognize him. His long hair was all tied up in a ponytail, and his beard was trimmed, and he was wearing clean clothes. "I came prepared in case they wanted to do it right now - I've got my Bible and everything." Jim walked out of the house, and told Brad he looked totally different. "I got dressed up in case you two lovebirds wanted to get hitched now - After I got out of prison, I applied for a mail-order ordination. It's legal, and under the circumstances, I'm just about all you've got." Jim told him he'd have to ask Gloria, who came out of her tent a minute later, gave Brad a big hug, and said they wanted to get married after breakfast. Bret asked Brad if he had breakfast, and asked him to stay for breakfast to save the trip. Breakfast was boisterous, and Bret got the shock of his life when Allen asked if he could talk to him in private. "Dad, is it OK if Veronica and I get married?"

"I already said it was OK - what changed your mind?"

"We don't have any guarantee about tomorrow, and Veronica and I are in love. As soon as she slowed down a bit, I realized she was a really special woman, and I fell in love with her. We haven't done anything except kiss yet, and I wanted to marry her before we had sex. I also wanted to spend the rest of my life with her, and if possible, raise a family. The quarters will be a bit cramped for a while up here, but hopefully when things quiet down, we can take one of the abandoned houses up here, and move in. Veronica's got 6 months left of birth control, so hopefully things will quiet down within a year."

Bret gave his eldest son a hug, and said "Yes, you have my blessing, let me talk to your mother. When did you want to get married?"

"After breakfast with Jim and Gloria if they don't mind."

"I better go tell your mom right now!"

"Maggie, Allen asked me if it's OK to marry Veronica. I told them it was OK by me, and they wanted to get married this morning."

"Bret - this is so sudden, he's just a boy!"

"Maggie, he'll be 16 in a week, and Veronica will be 17 in a month or two. We've been treating them like adults since the shit hit the fan, and getting married would seal it. Frankly, I think that they're more than ready, and we could all die tomorrow. Kids married young 200 years ago, and stayed married for life. We'll probably be soon returning to a 1800's style life again when we run out of diesel and other petroleum products. Farming will be done by draft animal and plow. Already medicine and other services we used to depend on are gone."

"Ok, if you think so dear. How about drinking?"

"Right now, if Allen asked for a beer, I'd give him one. We don't have enough booze around here for anyone to get drunk, so that won't be a problem."

"How about Jeremy and Natalie?"

"If they're smart, they'll wait a few years. Jeremy's too immature yet to handle the responsibility of a wife and family, and Natalie is still a teenager."

"Ok, if it's already a done deal, let's get them hitched. Good thing the boys have their own bedrooms."

"Allen mentioned homesteading one of the abandoned houses up here when things quiet down, so they won't stay here forever."

"Actually, I'm glad. It would be too crowded with infants around here."

The 4 of them met after breakfast, and Allen said "Mom, I'm sorry I didn't ask you first, but this sort of sprung up - with Jim and Gloria getting married, it pushed my plans ahead. Veronica reminded me last night that we don't have tomorrow as a guarantee. I realized she was right, and asked her to marry me."

Maggie held her eldest son and said "I'm proud of you son. You'll make a good husband and father. Remember, if you have any questions, just ask us."

"Ok, where's everything go?"

The 4 of them laughed themselves silly, then Bret said "I'm sure you two will figure it out." With that, they went to get dressed for the double wedding. Brad was surprised when he was

told he would be officiating at a double wedding, but took it in stride. He decided that the two couples could get married together, and act as witnesses for each other. Once everyone was all dressed they assembled in the living room. Since no one had the appropriate music, the brides entered silently, and single-file. Gloria grabbed Jim's hand, and Veronica grabbed Allen's, then they turned and faced Brad.

"Dearly Beloved, we are gathered to join these two couples in Holy Matrimony." It was a simple ceremony, he read from Corinthians, had the couples repeat their vows, then pronounced them married, since none of them had rings. He said that they really didn't need rings, since they were an external cue to people they didn't know that they were married, and off-limits, and everyone knew everyone up here. Finally they turned and kissed their brides.

Since they just ate, Bret decided to forego the reception until dinner, and asked the newlyweds if they minded going shooting on their honeymoons. All 4 of them agreed, so they got changed, loaded the trucks, and drove to the quarry. Allen and Veronica were both working with their scoped AR-15's on the 300-yard line, while Jim and Gloria got their scopes dialed in on the 100-yard targets, then gradually moved out to the 300-yard line by later that afternoon. Leroy was pleased when all 4 of them were hitting center of mass at 300 yards. No one was ready to make head shots just yet, and frankly 300 yards was almost too far for the AR-15 and the .223 round which was slowing down considerably by 300 yards, increasing the rate of drop.

Maggie and Nancy stayed home to make a special dinner for everyone. Bret and Bear got a chance to talk between rounds of pistol fire, and agreed that having Jeremy and Veronica married so early would take some getting used to. Bret hoped Maggie had set aside some cloth diapers, bleach, and baby stuff. Knowing her, he knew she probably did. She was a bigger prepper and pack rat than he was. Before the shit hit the fan, they'd go out to garage sales on weekends, and buy stuff like that for pennies on the dollar. Since Bret had the money, they tunneled and blasted deep into the mountain, and he had over 10,000 square feet between his house, garage/shop, and storage, with the storage in the "basement". He paid a company to drill, blast and excavate a huge hole in the mountainside, then stabilize it with shotcrete and steel columns. The columns also supported the decking for the main floor, and there was 12 feet of vertical space underneath the main floor that they could use for storage, and his aquiculture setup.

Dinner turned out to be the last Prime Rib roast they had in the freezer, with all the trimmings. After dinner, everyone gave gifts to the newlyweds. Just like Bret suspected, Maggie had stored hundreds of cloth diapers, along with bleach in the form of Shock-it, soap, and baby stuff. She gave each couple 1/3 of the stored supplies, saving the 3rd for Jeremy when he got married. Bret made a present of the E&E kits and Glocks to Jim and Gloria, and gave Allen and Veronica a trailer-full of stuff they'd need to homestead one of the other houses in the area. He told them they were welcome to stay with them as long as they wanted, and he'd store the

stuff for them. When they were ready to move, they'd all help them get established, and the supplies would help them survive. He gave Allen one of his National Match M-1a's with a nice scope, 10 20-round magazines, and a case of .308 match ammo, and another of JHP hunting ammo. Bear and Nancy gave their daughter and Allen 100 Canadian Maple leafs, which was 1/3 of what they brought with them. Veronica already had her scoped AR-15, and a case of JHP ammo, and another of FMJ practice ammo. Leroy gave each couple 5 silver dollars, since he didn't have as much stuff with him, but he wanted them to have something. Once all the presents were given out, the newlyweds retired to their tent and Allen's bedroom.

Chapter 9

The next morning, Jim and Allen looked worse for the wear, but Bret took 1 look at them and said "They'll live" then promptly got up and made breakfast. After breakfast, they went back to the quarry for more shooting practice. Everyone was up to speed, and could shoot "minute of dirtbag" out to 300 yards with their scoped rifles. Leroy hoped that would be good enough.

Later that day, Brad called and asked Bret if he could help him hang the lights for his aquiculture setup. Bret volunteered Allen to help them since he was tall and could easily reach high enough to hang the chains from the nails while Brad and Bret held the fixtures. It took an hour or two to get everything hung, then Bret and Allen drove up the road to check out some of the neighbor's houses. Several of them appeared abandoned, including 1 with 10 acres that was adjacent to Bret's house. Bret took out his Electric lock pick, and soon had the front door open. There was little damage to the house, and all it needed was a good cleaning. Bret asked Allen if they wanted this house, or if they wanted to keep looking. It was a stick-built house, which meant it wasn't as secure as his dad's place, but in an emergency, if they had enough time, they could make it back to his dad's place.

The thing that got Allen's attention was the massive central masonry heating stove with a separate cooktop. Someone was planning on surviving if the power and gas were disconnected. Allen realized that once the propane ran out, his mom and dad would be cooking on wood too. This house was looking better and better. The pantry was full of food and supplies, and as they checked out the rooms, there was more and more stuff they could use. Bret knew the owners, and knew they worked near the coast in Huntington Beach, and were probably killed by the quake and tsunami. They had plenty of radios to keep in touch, and the owners had a small 5KW solar power system for emergencies. In the office, there was a brand-new laptop and printer in good shape, and in the closet was a gun cabinet. Luckily it had an inexpensive lock on it, and Bret got it open after working on it 5 minutes. Inside were 4 AR-15's and 4 sets of deuce gear including 45 caliber pistols with 4 spare mags each, a butt pack, and 2 canteens. Hanging next to it were 4 LBV's and 4 Kevlar vests that looked like they might be Level IIa or better.

They were rummaging through the kitchen when Allen spotted a set of keys hanging on a nail. One looked like the front door key, so he tried it while the door was open, and it worked the lock. There were several other keys on the chain, and Bret suggested checking out the garage. Inside was an old Jeep that looked at least 30 years old. It was a 4x4, and Bret guessed that his neighbor used the Jeep as a Bug Out Vehicle, or to get home during the spring mud, since it had big huge mud tires on it. Next to it was an old tractor with implements. They looked around back and spotted an above ground tank full of gasoline according to the sight tube. Bret hoped it was a 500 gallon tank, but there could be anywhere from 300-500 gallons of gas stored in the tank.

Bret turned to Allen and said, "Son, it looks like the Nichols were set up. They worked in Huntington Beach, and I'm pretty sure they're dead, or they would have made it home by now. If you want, this place is yours and Veronica's. They have 5 bedrooms and the office, so you have enough space for a family. They've got a huge garden out back, 500 gallons of treated gasoline, a tractor and a Jeep. His water is like ours, and connected to an Artesian well, so you don't need power for the well, except maybe to pressurize it. Do you want to run Veronica over here and see what she thinks?"

"Sure Dad, I'd love to have my own home, and this just accelerates my plans -again. If we could come back to your place in an emergency, like if we're under attack, I'm sure Veronica and I would love to have this place."

"Son, you can always come home, especially if we were under attack, or any emergency. It will take us a day to move your stuff over here, so you two should spend the night in your room again."

"Thanks Dad!"

They climbed back into Babe, and drove home. When Allen told her about the house up the road, Veronica was very happy. They drove up to see it, and found a bunch of new stuff, like canning supplies and a whole bunch of miscellaneous supplies stored in Rubbermaid totes in the basement. It would take them days to go through the basement by itself. Veronica decided they could move in tomorrow.

When they came back, Allen gave everyone the good news, then suggested to his dad that Jim and Gloria take his old room once he was moved out. He was sure they were getting tired of sleeping on an air mattress on the ground, and his room was well insulated. Bret talked to Maggie, who OK'd the idea, at least until Jim and Gloria could find their own house like Allen and Veronica did. Bret decided that after he got Allen and Veronica settled, they would check the next couple of houses up the fire road, and see if they were abandoned too.

The next day, they loaded all of Allen and Veronica's stuff into the big U-haul trailer, and pulled it up the fire road with the Ramcharger. 2 trips later, they had everything transferred from Bret's house to Allen and Veronica's new house. Maggie and Nancy helped clean the new house, and put stuff up while the men hauled the boxes and furniture into the house. Later that evening, Maggie brought over a casserole for dinner. After dinner, they went to bed in the Nichols' large and very comfortable King Size master bed.

The next day, they helped Jim and Gloria scout out a new house. The one right next to Allen's was abandoned, but wasn't suitable, since it was 100% electric, without any backup power source. The next house up the road was much more suitable, but smaller. It had a full AE system with a grid-sync inverter set, a nice battery bank, a roof full of panels, and several wind

generators. It was only a 4 bedroom, but Gloria didn't mind, since they only wanted 2-3 kids anyway. It wasn't set up as nice as the Nichols' place, but they could make do. They had plenty of food and supplies stored, and they too had room for a garden. If they could borrow Allen's tractor, they could both plant large gardens, and can enough to make it through the year. Bret knew there were small Mule Deer in these woods, and he could keep both Allen and Jim's families in fish if he expanded his Tilapia tanks. He wished Allen's place had a bigger inverter set so they could have their own aquiculture setup, but the 5KW system was too small to power the necessary appliances like the washer, and have enough power left over for a aquiculture setup. Between the 3 of them, they had enough supplies for several years. Their only problem would be paper products, which would run out eventually. Fortunately, the Nichols were preppers too, but not on the scale that Bret and Maggie were.

Once everyone was settled, they decided to go shooting at the quarry again. That afternoon, Natalie had returned to the house, and seeing a lone dog that reminded her of her pet that died a few years ago, walked over and extended her hand. Bret walked out of the house right as she got within petting distance, and he yelled "Natalie, NO!" Before he could react, the dog bared it's teeth, lunged and bit Natalie's extended hand. Fearing the worst, Bret pulled his P-14 from the holster, and shot the dog before it could bite her again. He kicked the dog away from her to make sure it was dead, picked Natalie up, and carried her back into the house. "Maggie, Natalie was bit by a dog that was acting funny. We need to get her wound cleaned as fast as possible, then see what we can do for her. Remembering the protocol for an animal bite, they cleaned the wound and the surrounding tissue with Betadine solution, then 70% isopropyl Alcohol. Bear ran in about that time, and Bret told him what had happened while Maggie read all the medical textbooks she had. The news was not good, if she was infected, without rabies vaccine, she had a very good chance of encephalitis or at least an extremely high fever. The incubation period could be anywhere from 3-8 weeks. Without the vaccine, all they could do was offer supportive care, antibiotics to prevent infection from the bite, and pray for her. Bear and Nancy quickly started praying for her as they moved her to the sick room in the basement where she could be isolated. Once she was resting comfortably, the 4 of them and Leroy met in the kitchen.

Maggie gave Bear and Nancy the bad news "Without the vaccine, if she was infected, she could die in a month or two from very painful encephalitis. All we can do is pray."

Bret took Bear aside and said "I hate to say this, but if she is infected, and gets fully symptomatic, the kindest thing we can do for her is kill her. I don't have any narcotics or anything that would guarantee it will kill her painlessly. I couldn't shoot her, and I know you can't."

Leroy overheard their conversation, and in his low serious voice said "I can do it. I saw a boy in South America die from Rabies infection, and it wasn't pretty. If I had to, I could shoot her in the head, and she'd never feel a thing."

Bear and Bret looked stunned, then realized that Leroy was right. Bret looked at Bear, who nodded, but didn't say a word. If Natalie had to be killed, Leroy would do it.

For the first week or so, Natalie was showing no symptoms, and her temperature was normal. On the 9th day, she started running a fever, and they were afraid she had contracted rabies. Jeremy realized he might lose Natalie, and spent as much time as he could by her bedside, mopping her forehead with cold towels, and giving her ice water to drink. Over the next couple of weeks, she didn't get any worse, then right at the 8th week, her fever spiked. Fearing the worst, Maggie told Jeremy to make sure he said goodbye to Natalie before dinner that night. He spent the whole day by her side, taking care of her, and right before dinner, he leaned over, kissed her on the forehead, and said "See you later Sweetheart."

+++++

BANG!

Chapter 10

...BANG!...BANG!!

"Nice Shooting Natalie!" Jeremy walked over to Natalie, and gave her a bear hug. She had just put the entire magazine of her .45 in the kill zone of a B-25 at 15 yards. Jeremy was still amazed at how fast Natalie had recovered once her fever broke.

"Jeremy, you remember that night when you kissed me on the forehead? 10 minutes later Leroy walked in with his .45 and said "Sorry Natalie, but I have to do this. Suddenly your Mom burst in and said "Wait Leroy, she doesn't have Rabies - I can prove it. One of the symptoms is hydrophobia from the restriction of the throat. Here, I'll give her a glass of water." Your Mom handed me a glass of water, and I drank the whole thing down like I didn't have anything to drink for a week. Leroy lowered his gun, and his shoulders slumped with relief. It turned out I was having an allergic reaction to the antibiotic. Who knew that an allergic reaction would so closely mimic the symptoms of Rabies? Once your mom stopped the antibiotics, I immediately got better!"

In the weeks following Natalie's brush with death, they got much closer. Jeremy was too young to get married, so they were "going steady" - it's not like there was anyone else around their ages, so the point was moot, still Bret thought it was cute. The 2 of them were inseparable, and they both started growing up quickly, taking on responsibilities even though they were still teenagers.

Veronica and Allen had settled into their new house. They needed a lot of help getting the garden started, and Veronica was busy inventorying everything, and arranging their storage. When that was finished, she helped Allen with the outdoor chores. They had to cut wood for their stove, till the garden to raise vegetables, and a million other tiny details needed to keep a house running. The two of them were never more tired or happy in their lives. Jim and Gloria borrowed Allen's tractor, and they both planted as big a garden as they could possibly handle. Brad drove his hydraulic splitter over to their houses, and everyone helped them cut enough wood to last several years while they had the gasoline. Brad suggested that they needed to get some horses and stock soon, and one of the farmers up the road raised chickens and pigs, and might be willing to trade. Another neighbor raised draft horses, and another raised quarter horses including Arabians and Palominos that had been featured in the Rose Bowl Parade. Bret was in a quandary - they had already buried the anti-vehicle mine, they might get there and no one was home, or they might be home, and already sold off their excess stock. The Russian Anti-tank mine was too dangerous to disable safely without blowing it, and they only had a couple. If they detonated it in place, the entire valley would hear the explosion, and the last thing they wanted to do was to attract attention!

Leroy spoke up "Bret, we didn't put the mine in the center of the roadway, I deliberately set it in one of the ruts so a vehicle would drive over it if they went right down the middle of the road. There's more than enough room to straddle it with your truck and trailer if you want to. I'll guide you around the mine. We can't do this too often, it's dangerous, and the 2nd set of tracks could tip an invader off that there's something amiss."

"Brad, isn't Jerry Lambert a Ham?"

"Yeah, I remember hearing him on the radio. It might be worth the risk to try contacting him using low power."

Bret decided to try contacting him on the radio, made sure his radio was set to low power, and keyed the mike. "KG7ABD, this is KG7ADK."

"KG7ADK, long time no hear Bret. What's up."

"We're looking for some pigs and chickens with feed to trade. We could also use a couple of horses and some feed."

"Glad you called, we've got a sow that just had a bunch of piglets, and no way to get them to market. I've got some laying hens you could have too. The guy next door with the horses never made it back, I've been trying to feed them, so I'd appreciate if you could take them off my hands - they're too much work."

"Does he have a 4-horse trailer there?"

"He's got several, and a gooseneck trailer to haul feed on. You could take the horses and feed in a couple of trips."

"How many horses does he have there?"

"He's got 6, 5 mares and a stallion. I really can't care for them, I'm too old for this, so if you want them, they're yours."

"What do you want for the pigs and chickens?"

"How about you just owe me for them. I don't want any gold or silver, I can't eat it anyway."

"You need any diesel or wood cut?"

"Now that you mention it, I could use 50 gallons of Diesel. I'll trade you 6 pigs and a dozen laying hens with feed for 50 gallons of diesel."

"You've got a deal, when do you want us to pick them up?"

"How about first thing tomorrow?"

"See you then, I'll be driving my Dodge Ramcharger."

"Ok, KG7ABD Clear and 73's!"

"KG7ADK Clear."

"Well if that don't beat all - Either he's got way more pigs and chickens than he wants, or he's giving us a sweetheart of a deal! It will take 2 trips to carry those horses here."

"Let's get the pigs and chickens first, then get the horses."

"That will mean 4 trips over the mine."

"Can't be helped. Either way you have to make 2 trips for the horses, since he only has a 4-horse trailer. Be glad it's not a 2-horse trailer, or you'd have to make 3 trips just for the horses, and another 1 for the feed."

"Looks like you've got guard duty tomorrow Leroy, I don't want anyone going Boom!"

The next morning, Bret loaded a 50-gallon drum onto the back of the Dodge, filled it full of diesel, then hitched the big trailer to it, and drove carefully over the Russian Anti-tank mine, praying the whole way. Leroy stayed there to guide him on his return trip. 20 minutes later, he drove up to Jerry's front gate, and tapped the horn. Jerry walked down to open the gate, carrying a shotgun. Once he recognized Bret, he pointed the barrel at the ground and unlocked the gate. First thing Bret did was offload the diesel into Jerry's above-ground tank, then he drove over to the pig pen, and the chicken coops, and shut down.

"Bret, nice to see someone for a change. Martha and I haven't seen anyone since the Big One hit."

"I don't know if anyone else made it, all my neighbors except Brad are missing. I put Allen and his wife in the Nichols' place, and Jim and his wife Gloria in the Smith place."

"Isn't Allen 16?"

"Just turned 16, and his wife's 17. No point in waiting until they're graduated from College, since most of them are flatter than a pancake."

"Got a point there - I heard the news, and most of California is heavily damaged, and what the earthquakes didn't get, the fires and looting did. Now Big Bear is acting up, and if that blows, that will cause even more problems."

"Brad got some visitors last month who warned him that some biker gangs are looting and rampaging west of us, so you might want to stay off the radio unless it's an emergency."

"Ok, but we're close enough to talk via Simplex on low power, I doubt anyone can hear us unless they're within a 10-mile radius of the place. Besides Mount Wilson blocks the signal to the west anyway."

"Still, I wouldn't talk any more than you have to, it might attract the wrong kind of attention."

OK Bret, let's get the pigs and chickens loaded, then I'll meet you next door this afternoon. I've managed to keep them fed and watered, but they need more care than I've got the time or stamina to do. Their hooves haven't been cleaned, and they badly need to be washed, brushed and combed."

"Maggie's the resident Horse Lady, she'll know what to do. She told me to bring all the tack and equipment while I'm at it. I'll take what I can fit on each trip, so you won't have to do this again tomorrow."

They loaded the boxed hens, and Jerry herded 10 young pigs up the tail ramp into the bed of the trailer, then he loaded 10 bags of cracked corn into the bed of Bret's truck, and said that would be enough to feed the chickens for a year, and he'd have to locate some more feed after that, or slaughter the chickens to keep them from starving. Bret thanked him, then drove back to their house. They already had a coop and a pig pen erected by the time he came back.

"We're going to need more chicken feed by the end of the year, or we'll have to butcher these chickens to keep them from starving. I doubt they had much feed for the horses on hand either."

"Dear, we've got over 40 acres of good pasture land right across the fire road, and it's already fenced. All we need to do is supplement their diets, and keep them clean."

"Great, well that solves that problem. I'm going to get the horses next, and all the tack and equipment I can carry."

"I better go with you when you get the horses, or it might take all day to get them into the trailer, or you might stress the horses."

"What about the mine?"

"You made it so far, I'm hoping you can do it 3 more times, I'd hate to be a young widow!"

They drove carefully over the land mine, and made it back to Jerry's neighbor's house. Bret picked the lock on the gate and drove up to the horse corral right as Jerry walked over there.

"How'd you get past the gate?"

Bret held up his electric lock pick "With this - I've used it in the shop to open locked doors when 1 of the mechanics locked the ignition keys in the car."

"Just make sure you lock the gate when you leave."

Maggie jumped down, and gave Jerry a big hug.

"How's it going you old Codger?"

"Who you calling old Maggie?"

Bret remembered that Jerry was an old friend of Maggie's dad, and was the reason they moved up here in the first place when he told them about the perfect lot for their "Survival Retreat". With Maggie's help, they quickly got the 4-horse trailer hooked up, and the mares loaded. Bret busied himself carrying tack from the shed to the bed of his truck, loading it as full as he could full of blankets, saddles, bridles, brushes, combs, a hoof pick, stall shovels, etc. They were finished about the same time, and Maggie told Jerry they'd be back for the Stallion and the other mare later that afternoon, so they were going to close the gate, but leave it unlocked.

When they got back to the fire road, Leroy was very careful lining them up, since the trailer had a narrower track than the truck, but they would still clear the mine by several feet. Bret put the transmission in low and idled over the mine, then drove up to a gate at the field opposite their house. Bret picked the lock, and Maggie led the mares 1 at a time down the ramp and turned them loose in the field. She smiled when she spotted the creek running through the property. She remembered that was a year-round creek, so they wouldn't have to haul water. The previous owners had made a couple of holding ponds by damming the creek in several spots. Once the mares were settled, Maggie closed the trailer back up, and they drove back to get the rest of the horses. The Stallion was temperamental, but Maggie settled the big black Arabian Stallion down, and he allowed himself to be lead into the trailer. Finally they led the last mare into the trailer, and drove home. Once they got the Stallion and mare into the field, Maggie said Bret could handle the last trip by himself, she didn't know if she could handle the stress of 2 more trips over an armed anti-tank mine. Bret dropped Maggie and the horse trailer off at their house, and drove back to pick up the hay and any other feed he could find. Bret was shaking his head when he got to the corral, and realized the last shipment of hay was still on the gooseneck trailer, so he installed his 5th wheel hitch, and connected to the trailer. The shed was

full of bags of oats and other grains, so he packed them around the hitch in the bed of the Dodge, filling the bed barely leaving enough room for the gooseneck. Once he was sure he had everything, he thanked Jerry and drove slowly out to the gate, locked it behind him, and drove very carefully over the anti-tank mine while Leroy spotted for him. Once he was clear, he stopped, and let Leroy ride up front back home.

"Thanks for spotting for me. I don't want to know how close I got to that mine. I'm sure Maggie's worn out a set of Rosary beads by now. I'll give her the good news."

"Hi sweetie, I'm home."

"Glad to hear that, we're all fine here. See you soon."

10 minutes they pulled into their driveway, and as soon as he was out of the door, Maggie hugged the stuffing out of Bret with tears in her eyes. "I pray we never have to do that again!"

"Sometime in the next year or so, I need to get chicken feed."

"Why not just quadruple your worm farm, and feed the chickens the worms?"

"Good idea - I'll buy a bunch of worms from Brad."

"Better yet, trade him some worms for eggs."

Once he got the gooseneck trailer parked, the bed unloaded, and his 5th wheel hitch removed, Bret called Brad.

"Hey Brad, how'd you like to trade worms for fresh eggs?"

"Sure, I've got way more worms than the fish can eat now, and all my tanks are full of Tilapia."

"Jerry gave me a dozen laying hens and 10 50-pound bags of cracked corn. Maggie suggested quadrupling my worm farm and feeding the chickens worms."

"Great idea. I'll get going on building a worm rack, and I'll bring all the worms I can spare over there. Once the chickens start producing, I'll walk over there once a week and get some eggs from you."

Maggie took a closer look at the "hens" and said "Dear, one of those Hens is a rooster, and there's 14 of them, not 12."

"Great, that means if we let some of the eggs hatch, we'll have a self-replicating flock. I

wonder why Jerry did that?"

"Bret, he was one of my Dad's best friends, and I'm sure he's just looking out for us. They aren't getting any younger, and their kids lived near Huntington Beach, so they're probably dead."

"Maybe I shouldn't have been so hard on him about using the radio."

"No dear, you were right. All it takes is 1 dirtbag to intercept our calls with the right kind of gear, and we'll have all kinds of trouble up here in a heartbeat. The more we use the Ham radios, the better a chance they have of intercepting and locating the transmitter, or at least our general direction. Thank God we've got all those FRS/GMRS radios. They're too short-range to easily intercept, unless you're really close to the transmitter. If they were close enough to intercept that, we'd have bigger problems than just the radios."

2 days later, Brad showed up with a worm rack and 12 Styrofoam containers full of worms. They got the rack setup, and Bret gave Brad a beer, and they sat down to talk.

"How's things going at your place?"

"Pretty lonely and boring. Some days I really miss Annie, then I remember God has a plan and a purpose for my life, and no matter how bad I feel, I need to keep on trucking."

"I hate to say this Brad, but you need a wife. It's not right for Man to be Alone."

"I know, I read Genesis too. I guess I could fall in love again, but there's no one around."

"Let's pray about this, and see what happens."

Brad laid his big hands on Bret's shoulders and started praying. 10 minutes later, Bret's 2-meter handy talkie came alive.

"KG7ADK this is KG7ABD."

"KG7ABD go ahead."

"I got an emergency call from up the road. One of the ranch wife's husband didn't come home, and she needs help."

"Any idea about her specifics?"

"She's got 2 young kids, and plenty of supplies, but she's scared all by herself. She's already

shot 2 looters, and can't handle it by herself anymore."

"KG7ABD, wait one."

"Brad, this could be the answer to your prayers. Even if there's nothing romantic going on, here's a woman in distress. You've got plenty of room at your place, and if I remember, she's about your age. Her kids are out of diapers so you don't have to go through that."

"What if her husband comes back later?"

"It's been almost 6 months, if he were alive, he could have made it home on foot from anywhere in LA County by now."

"Ok, but I'm only doing this as a favor to you, and to protect an innocent woman with young kids."

"Jerry, tell her we'll be up there today. Brad's a widower, and about her age, and a good Christian Man who's willing to help her with no strings attached. He's got enough rooms at his place for everyone, and we're very secure around here."

"Ok, I'll tell her you'll be there in a hour or so."

"I'll be driving the Dodge Ramcharger."

"Guess what Brad - We're going to drive up there right now."

"Glad I bathed this morning."

Bret told Maggie what he was up to, and said he'd be back later that evening. Bret and Brad climbed aboard Bret's Dodge Ramcharger, and drove to the ranch house. A middle-aged beautiful redhead met them with a shotgun, saying "That's far enough."

Bret spoke up "Jerry sent us, I'm Bret, and this is Brad."

She lowered her shotgun, and they got out slowly. After a few uneasy minutes, she invited them inside the house. Finally she said "Where's my manners, I'm Kelly."

"Kelly, Jerry told us a little about your problem. We might have a solution, but if we could get some details, we could know for sure."

"Ok, My name's Kelly Johnson. I've been married to Dan Johnson for 10 years, and we've two sons, Zack who's 6, and John, who's 4. Dan worked at the Long Beach refinery, and I spoke to

him right before the Tsunami hit. He said they were too close to the coast to bother running, and he told me he loved me, and to take care of the kids. He said there was a note in the cabinet above the refrigerator with a list of stuff I needed to know about. We had a year's worth of food, and plenty of water, but no power. We made out OK, until last week 2 dirtbags tried to take over, and have their way with me. I made it to the shotgun, and buried them out back. I got sick later, and finally realized Dan wasn't coming back, and I couldn't defend this place by myself and raise the boys, so I'm open to suggestions.

"Kelly, my name's Brad, but all my friends call me Moose. I used to be an outlaw biker until I accidently killed my wife riding a chopper while I was drunk. I was sentenced to 10 years in prison, and was ready to kill myself when a Prison Ministry chaplain met with me, and convinced me I had an alternative to killing myself. I could give my life to Christ, and spend the rest of my life serving him. I've a huge house next to Bret's with water, and an AE system so we've got electricity, and wood heating. I've got enough rooms so everyone can have their own rooms. I'm offering you to stay with me with absolutely NO strings attached. I'm doing this as a favor to Bret, and also because you're an innocent woman with kids in distress. I'm still getting over Annie, but I could use the company."

"OK, before I decide anything, I'd like you to meet my boys. Zack, John, could you come in here please."

2 rambunctious boys ran in the room and skidded to a stop when they saw Brad.

He crouched down to their level, and said "Hi Zack, John. I'm Brad." He stuck out his hand, and Zack bravely shook it. 5 seconds later, he wrapped his arms around Brad's huge leg and held on for dear life. His brother John did the same thing seconds later. Brad gently laid his enormous hands on their shoulders.

Finally Zack said "Mister Brad, are you our new Daddy?"

"No, but I'll protect you and take care of you if you want. Your Daddy is dead. He died in the quake."

"I know, Mommy told us. I still can't believe he's gone."

"Part of your dad will always be with you - right here." Brad touched their hearts with his index finger. "I can never replace your daddy, but I want to make sure you grow up big and strong." At this point Kelly lost it, and threw her arms around Brad. Bret turned quietly to go outside for a while. Brad came out 10 minutes later, and said "Kelly agreed to move her family to my place. Thanks for bringing me here, they really need me. She's got a running truck with more than enough room to pack all their stuff and stay at my place. I've got it from here. Thanks Bro."

Brad gave Bret one of his trademark Bear Hugs, then turned to be with Kelly's family again. Bret walked back out to his truck, thanking God that Brad was able to help, and praying that they'd work out OK. He drove home, and gave Maggie the good news.

Chapter 11

Over the next week, Brad got Kelly and her boys moved to his place, and settled. He was amazed at the list of stuff Dan Johnson had set aside. Kelly hadn't even begun to go through the stuff he had stored in their basement, and it took several trips to bring it over to Brad's place. When Kelly saw it, she knew Brad was a Bachelor, but she knew that within a week, she could have the place much neater. She really liked Brad, and was glad that he was willing to be her friend for now - she was still in mourning for Dan. She thought that his nickname should have been Teddy Bear instead of Moose - he was a Big Teddy Bear around her and the kids, yet she knew that if someone tried to hurt her or her boys, she'd see Brad's dark side. She was scared of what she might see, but grateful that her protector was capable of some of the stuff Brad had told her about. He kind of reminded her of Dan in that regard. She hadn't heard much of what he did in Desert Storm, but what he did tell her scared her to her core. She was amazed at the transformation in Brad. He had gone from a sociopathic killer to a gentleman in every sense of the word since he had given his life to Christ. When he showed her the contents of his cache, she said "Cool, I always wanted to fire a full-auto gun!" When he heard that, he knew he had a keeper.

He found Dan's firearms cache, and realized Dan was into full-auto guns even more than he was, and must have been collecting illegal firearms for a long time. He asked Kelly about it, and she said something about him being in Desert Storm, but she never got the full story. One of the weapons was a SEAL armory conversion of the M - 60 Machine gun for 1-man use, with 2 spare barrels and 20 200-round belts of 7.62 NATO Combat mix. Brad knew he had found his personal weapon! Dan had several M-16A2/M-203's and 4 M-4/M -203 SOPMOD kits and over 10 cases of NATO 5.56mm ammo, including 2 cases of SS-109. He didn't say anything to Kelly, but he suspected Dan might have been in Special Forces, because they were the only people during Desert Storm that had access to the SOPMOD kit. Next to the kit was 4 crates full of 40mm HEDP and HE grenades for the M -203's. With 72 grenades per crate, he knew that Dan had planned well to outfit his family in the event of TSHTF.

He called up Bret and suggested everyone meet at the quarry, he was going to divvy up the full-auto weaponry in his cache, since Dan had more than enough stuff for him and Kelly, and their two boys. The next day, they all met at the quarry. Kelly decided to keep her 2 boys in the truck so they wouldn't be harmed by the loud noises, or get in the way and possibly run in front of the firing line. Brad counted noses, and realized he had enough M-16's with grenade launchers for everyone, so he gave 1 to everyone. Leroy already knew how to use the weapons system, so he asked Leroy to teach everyone how to use it. Brad located 2 cases (24 rounds) of 40mm practice grenades, and hoped it would be enough to get them familiar with the grenade launcher. Leroy took almost an hour explaining how the M - 16 and M -203 worked, then let everyone fire it semiauto and standing at the 100-yard target until the whole magazine was inside the kill zone on the B-25's they had put up previously, then he showed them how to fire

the gun in burst mode. Everyone eventually figured out how to keep all 3 rounds in the center of mass.

Later that afternoon, everyone got 2 practice grenades at a truck body about 150 yards downrange. Most of them were able to hit the truck, or at least close enough, by the second grenade. Finally Brad told them he had some other toys in the back, and he'd give them out to people who could use them, and were good enough to use them effectively. Allen selected a Yugoslavian Paratrooper AK-47 with the under-folding stock, and Veronica took an MP-5SD3. Gloria thought the little MAC-10 was cute with the suppressor, so they took 2 of them and a case of 9mm ammo. Bear and Bret selected MP-5SD3's for Jeremy and Natalie, since they were easier to control than the MAC-10. Brad gave Bret and Bear both a crate full of hand grenades, saving 1 of them for himself, since Dan didn't include any hand grenades in his plans. Brad knew that a small baseball grenade was a great weapon for room clearing if you didn't care if the occupants survived the encounter. He added a crate of 72 40mm grenades to Bear and Bret's piles. Bret gave 36 of them to Allen and Veronica, and saved the rest for himself. Bear would give Jeremy and Natalie 36 grenades when they moved into their own house, hopefully a couple of years from now.

They spent the rest of the afternoon and evening practicing with their chosen weapons. Jim and Gloria were able to control their MAC's and not waste the entire magazine after about the 3rd magazine. Jeremy decided to shoot the AK in semi-auto mode unless they were being overrun. Natalie fired a quick burst from her MP-5SD into the target, and everyone was amazed that the entire magazine stayed in the target at 15 yards. Leroy explained that the MP-5SD was designed to do exactly that. With the integral suppressor, the muzzle climb was minimal. Jeremy and Natalie both fired their MP-5SD's with similar results. Allen talked to his dad, and asked him if he should switch to the MP-5SD as well, since they already had the M-16's. Bret thought it was a good idea, since the AK-47 Paratrooper was basically a close-range assault weapon, and didn't have the long-range accuracy that his AR-15 had. He traded Brad his AK for a MP-5SD3. His first magazine stayed in the kill zone, so he said he was ready to go. Everyone packed up to go home, and Brad asked Bret if he could get hold of Jerry and ask him if he had any more pigs and chickens. With 2 growing boys, they'd need a steady supply of meat. Bret had his mobile radio in his truck, checked to make sure the power was on low, and called Jerry.

"Sure, I figured they'd need some pigs and chickens if Brad and Kelly moved to Brad's place. Tell Brad to come over first thing tomorrow, and I'll give him 10 pigs and 12 laying hens. I've got another rooster I can spare so his flock will reproduce."

"Thanks Jerry, I'll give him the good news."

"Brad, he said come on over 1st thing tomorrow, and he'll have 10 pigs and 12 laying hens. He's got another rooster to give you. If you can spare it, you might want to give him some gas

or something."

"I've got another batch of worms, maybe he could use them to feed his chickens?"

"That might be a better idea - it looked like he was running low on Chicken feed."

"Great, I'll knock together a worm rack, pack enough worms to get him started, and give him a bag of Worm starter. In two weeks, his chickens will have all the worms they can eat." Brad shook Bret's hand, climbed into his truck with Kelly, and drove back to his place. Bret and Bear loaded their families in their trucks and drove them home. Bret dropped Allen and Veronica at their house, and Jeremy and Natalie rode with Bear and Nancy.

The next day Brad drove over to Jerry's place, gave him the worms, the rack, and the starter, and helped him set it up, then told him how to manage a worm farm. When he told him how many worms he could grow in 2 weeks, Jerry's eyes lit up. "Thanks Brad, I was running out of ideas on how to feed the flock, now it looks like I can feed the flock, and get some great soil for the garden too. I've got a hog that's ready for slaughtering I'll give you as well as the other pigs and chickens." Brad was glad he had bought those CD's with instructions for slaughtering animals, and bought the special tools to do it right. He'd never done it before, but he was sure he could figure it out. He told Jerry he'd never done it before, and Jerry said that if he could help him, they could slaughter it together at Jerry's place, then pack the meat and take it back to Brad's place. Brad thought that learning from an old pro would be an idea, so he called Kelly and said he'd be home later, that Jerry was going to show him how to butcher a hog, then give them the meat. Kelly said to make sure he called from the fire road, so she didn't accidently shoot him, or fire the Claymores. Jerry heard that, and his eyes bugged. No wonder Bret and Brad felt so secure! If he had a bunch of Claymores protecting his driveway, he'd be as snug as a bug in a rug.

Jerry showed Brad which hog they were going to slaughter and moved him to a holding pen next to the slaughterhouse, then they went of get the slaughter house ready for butchering the big hog. Jerry came back with a big sledge hammer, and before Brad knew it, he hit the hog on the head, knocking it unconscious. Jerry said "Grab a leg, and let's get Elmer up and get his throat slit before he wakes up."

Brad was a big strong guy, and between the two of them they got Elmer up on a gambrel by his hind legs. Jerry handed Brad a butcher's apron, and said "I hope you're not wearing good clothes?"

"Nope, I guessed I might be getting dirty, so I'm wearing an old shirt and pants."

"Ok, you're going to get stuff on you that might not come off. Now that we've got Elmer hanging from his hind legs, we need to slit his throat." Jerry picked up a big butcher's knife,

and with 1 swipe, severed both jugular veins, and the blood gushed into a huge basin. Once he had bled out, they picked up the basin, and replaced it with a clean bucket so they could use anything that fell into it. Jerry showed Brad how to skin the hog, then they removed the fat and saved it for lard. Once it was skinned and the subcutaneous fat removed, he took his skinner, and opened up the belly from the butt to the neck, and removed the neck and head. Jerry picked up and separated the organs and intestines he wanted, making sure the intestines had a big knot in both ends so the contents wouldn't leak out. He threw the organs in a separate bucket, telling Brad that the intestines needed to be thoroughly cleaned before they could be used for sausage casings.

He took a big electric saw, and split the hog in half by sawing the spinal column in half, then removed the loins. He separated the legs from the carcass, and told Brad that he needed them to make ham and picnics, which needed curing and smoking. With that out of the way, he started sectioning the hog from the front to the back, cutting the ribs, brisket, and butt sections off the hog. Jerry said that he could make bacon out of the brisket if Brad could wait a couple of weeks for it to cure. Brad said he loved bacon, so he'd make another trip for part of the bacon and hams. Jerry turned on his meat cutter's saw, and sliced the ribs and roasts into the right cuts, and wrapped them in butcher paper, then put them in a huge cooler with a couple blocks of ice. He asked Brad if he had a freezer that could hold all that meat. Brad said he had plenty of room, and thanks for the meat. Jerry said when he came back, he'd have some sausage for him. He needed to clean the intestines thoroughly, grind up all the edible scraps, and stuff them in the intestines, then smoke and hang the sausages until they were done. He said he'd call Brad when everything was done.

With that out of the way, Brad put the cooler in his truck, loaded the chickens and pigs, and drove home right before dark. He called Kelly when he turned onto the fire road, and was home 10 minutes later. They barbequed the ribs for dinner that night, and froze the rest of the hog. Kelly was amazed at how much meat they got from a 200 pound hog. Brad said that the hams, picnics, bacon and sausages were over at Jerry's place, where he was going to cure and smoke them for him. That night Brad, Kelly and the boys ate really well! Before she went to bed, Kelly walked up to Brad, put her arms around him, said "Thanks for taking care of us" and gave him a hug and a kiss on the lips. As Brad held her, she started crying, so Brad kept holding her gently as she got it all out. Finally she looked into his eyes, and said "Thanks Brad" and turned around, walked into her bedroom, and closed the door. Once Brad's pulse returned to normal, he took a cold shower and went to bed. Kelly was definitely a very attractive woman, and a good kisser!

The next morning, Brad awoke to the smells of breakfast cooking, got dressed, and Kelly was slaving over a hot stove. Brad walked up behind her, and she turned around, and gave him another hug. "Good Morning Brad. I hope you don't mind, but I'm used to making breakfast for everyone in the house."

"Heck no! I can't stand my own cooking. If you want to make breakfast from now on, by all means go ahead." Brad was amazed to see pancakes, eggs, and bacon on the stove, and a big pot of coffee. 2 minutes later, she said "Breakfast is ready" and before he knew it, Zack and John ran into the kitchen like a couple of miniature tornadoes. Kelly told them to wash their hands, then sit down for breakfast. 2 minutes later, they came back, sat down, and waited while Kelly put their plates on the table. Once Kelly was seated Brad said grace "Dear Lord, thanks for this food, and bless it and those who prepared it. Amen." He was encouraged to hear 3 Amen's in reply. 2 minutes later, the only noises were the two boys attacking their food. Brad noticed that breakfast was delicious, and told Kelly so. She smiled and asked "What's on the list for today?"

"I need to tend the garden, the worms, chickens, pigs, and the aquiculture setup."

"Ok, the boys and I can weed the garden."

"Don't throw out the weeds, we can feed the ones we don't eat to the fish."

"I'm going to have to get used to not throwing out stuff. A couple of months ago, we used to get our food at the grocery store, and throw the packaging in the trash that was collected weekly. Now I've got to remember that all edible food scraps go to the pigs, all the good weeds go to the fish, and not to throw out any paper products that can be recycled or reused."

"I know how you feel Kelly, I've been living up here by myself for years, and sometimes I still forget. Except now the consequences of forgetting are greater than before. Also, any time you're outside, you need to wear a gun and a fanny pack kit."

"What for?"

"The gun's for self-defense. Natalie was bitten by a stray dog a while ago, and almost died. There's no telling what's out here, and outside the line of claymores, there could be anything out here. The fanny pack is in case you have to leave here in a hurry. There's enough stuff in there for you to survive long enough to make it to the caches I told you about."

"I thought we were safe here?"

"Once society as we knew it collapsed, safety became relative. There's no cops or fire department to call for help, and I doubt even the military is in much shape to help. We're on our own, and if we can't defend ourselves, we die."

"Gee Brad, nice to see you're such an optimist."

"Just a realist Kelly. I know what can happen when normal society's restraints break down.

They're now gone, and it's everyone for themselves. This place is relatively safe, but only because of the mines and Claymores. A smart enemy can still bypass those defenses and get to us. That's why I distributed those automatic weapons the other day. Your ranch was nice, but totally indefensible. This place isn't as roomy, but way more defensible, and we've got food, water, power, and heat."

With that, Brad said "thanks for breakfast" and kissed Kelly on the forehead, then went into his basement, and came back with a fanny pack pistol belt with a Glock Model 21 and 2 spare 13-round magazines full of Corbon "flying ashcan" 200 grain JHP ammo and a 1qt military plastic canteen, cup, and stove. He opened the pack, and showed her the contents. She knew how to use just about everything, since Dan made sure that she knew everything he knew about survival. He closed the pack, handed it to her, and she belted it on. Bret told her the chamber was loaded, so she had 14 rounds on tap before she had to reload, there were 2 spare mags next to the holster, and 50 extra rounds with the loading tool in a ziploc bag in the fanny pack. Kelly was familiar with the Glock, and was comfortable shooting it. Zack said "Where's mine?"

Brad looked at Zack, and said he'd have one first thing tomorrow. He could put some age-appropriate stuff in there, like juice boxes, granola bars, a Mylar blanket, whistle, and some stuff he'd talk to Kelly about. When everyone was finished eating, they cleared the table and went to get their chores taken care of. Brad was glad for the help, because what once took him all day got finished by 3:00, and they were able to spend the rest of the afternoon doing fun stuff. Brad talked to Kelly, and she said it would be OK to include a Swiss Army Hiker, fire starting kit, and a mini-fishing kit in Zack's kit - he was a very mature 6 year-old. John's kit contained everything Zack's had except the knife, firestarter, and fishing kit. He even found 2 identical fanny packs to use. He gave the boys their kits at dinner, and they were acting like Christmas had came early. After dinner, Kelly sat down to talk with Brad.

"Brad, I know we've only been together for a couple of days, but I wanted to say I think I'm falling in love with you. I know you're not Dan, but you're really good with Zack and John, plus you know how to make me feel like a woman again, yet still remain a gentleman. I'm not ready for a physical relationship yet, but I want you to know if you want to hold me or kiss me, I won't break your arm."

Until I met you, I didn't think I'd ever get over Annie. I still think about her, but the memories don't hurt anymore. I think your decision to limit things to hugs and kisses is a really good idea. Even if we wanted to get physical, it's too soon for Zack and John, who still need to get used to me. I know Zack misses his dad, and I'll do what I can to help him deal with it, but I can't replace Dan."

"Brad, you've got a really kind heart, and I can tell you really like Zack and John, even though they're not your kids."

"Right now, if someone tried to hurt you or the boys, I'd die defending you if I had to."

"You barely know me, how can you say that?"

"Kelly, I'm starting to feel things for you, and my protective nature is starting to kick in. I'll try not to be overprotective, but ever since I was with Annie, I've always been very protective of women, and wouldn't tolerate any of the Brothers mistreating women. I nearly killed a club member who was beating up his old lady."

"You and Dan have a lot in common. I can sense something dangerous in you, right below the surface, yet I know that you'd never hurt us."

"Dan was probably in Special Forces. After Vietnam, a lot of Veterans including Special Forces joined Bike Clubs, including outlaw gangs because they didn't feel they fit in, so I've been around the type for 10 years while I rode with Sons of Satan."

"I've heard of those guys - they're almost like the Hells Angels."

"Kind of, only smaller. Now the Hell's Angels are trying to consolidate the outlaw biker clubs as chapters of the Hell's Angels. There's still several small outlaw clubs that haven't joined up, and a bunch of renegades running around now that law and order is flat on it's back. I had a visit a couple of months ago, asking me to come back to the gang, and warning me that there was a bunch of renegades running around. That's when we installed the anti-tank mine and the Claymores on the fire road. They could come over on foot, but it would take forever, since there aren't many trails around here and they'd have to go cross-country. Both our compounds are ringed with Bouncing Betty mines set up with trip-wires in a spider's web configuration. If you hear a mine going off, grab Zack and John and head for the basement shelter and lock the door, regardless of where I am. If I make it there, I'll knock "Shave and a Haircut" so you know it's me."

Kelly leaned over and gave Brad a big hug, and just held him for a while. He reminded her so much of Dan, it was scary. Dan was into preparedness, and had a contingency plan for everything. He even had one for if he died away from home, and hid a letter with detailed instructions in the kitchen cabinet above the refrigerator. The letter told her where everything was, and which neighbors to trust. That was what told her it was OK to call Jerry. Finally she got up to check on Zack and John, they were being too quiet. It turned out they were already asleep in their beds, and were tired from a long day doing chores. Kelly agreed, she was tired too. She looked at Brad and fought the impulse to lead him into her bedroom and make love to him. Brad would make a good father, but they had to wait. She definitely wanted to have some more kids, and hoped Brad did too. She walked over to Brad, kissed him goodnight, and went to bed, all by herself.

Chapter 12

The next morning, Brad woke to the sound of many choppers, then the buzzer went off. Knowing the Sons of Satan wouldn't stop by without calling, he rolled out of bed, climbed into his insulated coveralls and boots, grabbed his AK-47, his binoculars, the radio detonator for the Claymores, and called Bret saying "RED ALERT - I'll handle it."

He turned the radio off, put it in his pocket, and sprinted for the path through the woods that would lead him to a spot where he could observe the fire road section that was protected by claymores, got quickly prone and turned the radio on that would detonate the Claymores with a push of the PTT button. He scanned the road with his binoculars, and there were a dozen MZB's on choppers trying to negotiate the fire road, and having difficulty due to the muddy road. They seemed determined, and Brad scanned their faces and jackets to make sure he didn't know any of them. Their jackets sported a mixed bag of local small outlaw clubs, and some without any colors, so he knew they were part of the renegades Sonny had warned him about. He waited until the Tail End Charlie was past the first marked tree indicating the start of the claymore kill box, and switched frequencies to detonate 1 string of 4 equally-spaced Claymores set back 30 feet from the road. They had realized even with the extra separation, they had 100% overlap at the far side of the road from the claymores, and they gained another 30 feet of coverage by moving them back like Motorhead had suggested. Brad pressed the PTT button, and 4 Claymore mines exploded, throwing a deadly pattern of thousands of steel balls in an arc in front of each mine, mowing the motorcycles and riders down like a scythe cutting through a field of wheat. Seeing all the bikers were down, Brad turned off the detonator radio, putting the safety back on the detonator, then laid there listening for any more noises while he watched the road.

After 20 minutes, he radioed Bret "Situation resolved, condition yellow." meaning that the immediate threat was taken care of, but they needed to be careful in case the bikers were a diversion. 10 minutes later, he carefully moved forward to check on the bikes and the riders. All the riders were dead, and their bikes were damaged by the blast. He recovered anything usable from the bodies, including weapons and ammo that survived the blast, and took them back to his place.

He called Bret later, and asked him what to do about the bodies. If he left them there, the cat would be out of the bag, and any other group attacking them could figure out they had Claymore mines protecting the road, and choose a different route to attack them. Bret agreed, and drove his tractor over to the site, dug a big hole nearby away from the claymores, and used the loader to dump the bodies in. Brad took the bikes and anything usable away with his truck. Bret covered the bodies with a bag of quicklime, and filled in the mass grave, then went home. Brad told Bret they could use scavenged parts off the bikes for other stuff later, like a 2wd market trike that used less gas than the truck, and could carry a light load of food to a nearby

farmer's market to barter with their neighbors. He could make their engines run on a blend of methanol and gasoline for a long time. They were free resources so they should use them. Brad kept the guns and weapons he took off the dead bikers, including a couple of sawed off shotguns, Bowie knives, and other nefarious devices that survived the blast. He was bummed when he found 2 AK-47's too badly damaged from the blast to function, but he saved them anyway for parts.

That afternoon, Bret walked over to Brad's place with Leroy. They sat down to discuss their security arrangements. Short of posting an OP to watch the road, there wasn't anything they could think of to improve their security. They discussed anti-vehicle trenches, etc, but didn't have the bridging materials to bridge the trenches when they needed to use the roads, or an easy way to move them in or out. Bret had his extendable bridges, but they were designed for Babe, not a 5-ton load like one of the diesel pickups pulling a heavy trailer. Also the only way to easily place and remove them was using Babe's winch and derrick. Once they were out of diesel, they couldn't remove and replace the bridge. Leroy argued that they were probably done with the big vehicles for now, and their greatest threat was vehicles coming down the fire road. Brad had to agree, so later that afternoon, they dug two anti-vehicle ditches across the road 6 feet wide and 4 feet deep.

While Bret was digging the trenches, Brad was trying to think about what he could do with the salvageable parts of the Harleys. Most of the motors were damaged by the pellets, but by combining parts from different motors, he was hopeful that he could build 1 or 2 working motors to power stuff with. He wanted to build a small light weight tractor-type vehicle for work around the ranches that would get better gas mileage than the tractor when the didn't need the implements, or the trucks when they didn't need all that power. The Harley V-Twin motors put out about 125 horsepower, and the belt drive made them adaptable to many different ideas he had. It took Brad several months, but he finally got 2 motors rebuilt to the point where he thought they were reliable enough to power something useful. He walked over to Bret's house, and they decided to check out the rest of the houses on the fire road. They decided to use Babe, since it was the most versatile vehicle, and was small enough to turn around on the fire road. As they searched the other abandoned houses, they made a list of anything that was useful for later scavenging.

Brad finally found what he was looking for at the last house on the road. They had an old Chinese tractor with a gasoline motor that had self-destructed, and blew a piston right out of the block, and just sat there. Brad checked it over, and realized it would be a perfect donor vehicle for a project he wanted to build, so the carefully towed the tractor home using Babe as tow vehicle with a tow chain connected between them. Brad was glad the tractor's brakes still worked. When he got home, he took a closer look, and the tractor was a hydraulic drive system, and all the motor did was power the hydraulic pump that drove all 4 wheels, and operated the PTO devices. All he had to do was connect the drive pulley from the Harley's crankcase to the hydraulic pump. Once he fabricated the motor mounts, welded them into

place, and mounted the motor, he crossed his fingers and started the Harley motor. Good thing the old tractor's muffler was still in useable condition, or he'd need ear plugs to run the tractor. He had already checked the hydraulics, topped off the fluid from Bret's supply, and greased all the fittings. With the motor running, he checked the front loader, rear hitch, and finally engaged the drive. He was glad he had the Harley at quarter throttle, it was almost twice as powerful as the motor it replaced. He took off down the driveway much faster than he had anticipated, so he quickly slowed down and turned around to head back. Next he tried out the 4wd setting, and it worked perfectly. All 4 wheels got power in the deep soft dirt. He pulled it back on the driveway, shut it down, and called Bret to give him the good news - they now had 2 usable tractors as long as the gas held out. He still had another Harley motor that he could use, so he kept looking for stuff to build with it.

Two days later, Jerry called, and said the bacon, sausage, and hams were done. Brad asked him if he knew of any farmers or ranchers in the area that might have gasoline or fuel stored. Jerry said that a few up the road from Dan Johnson's place had above-ground tanks, and he hadn't heard or seen them since the Big One. Brad asked Bret if they could take Babe over to Jerry's place, and check out if there were any available fuel tanks at the other ranches. Bret said OK, because he could definitely use the fuel, and he had a lot of Pri-D and Pri-G in stock. They left that morning, checked out the farms first, and found 2 fuel tanks, 1 partly full of diesel, and the other partly full of gasoline. Bret emptied a quart of gasoline into a coffee can, and smelled it. It must have been treated because it still smelled fresh. He checked the tank, and it was towable, and he also had 10 50-gallon drums and a low-boy trailer sitting in his back yard. Brad looked around, and found a whole bunch more stuff they could use, and started brainstorming. Bret saw 30 6x6 posts that were 6 feet long stacked up, and told Brad that they could reinforce the center of the anti-vehicle ditches with 6x6's if they buried them down 2 feet, they'd be flush with the surface, and easily support the weight of the loaded trailer. They decided to leave everything there, get the meat from Jerry, and build the bridges. Bret slapped himself, and said with the extra gas and the second tractor, they could fill in the ditches, cover them with sheets of 1" OSB, and drive over them, then dig them back out. Brad told him if they were going to all that trouble, then they better strip all the surrounding farms and ranches of anything they could use first. He wasn't going to want to do this again. Bret suggested that Brad keep all the gas they found, and he kept all the diesel. They stopped at Jerry's place, got the meat, and asked Jerry if there was anything he needed from his neighbor's ranches.

"Yeah, about 100 gallons of diesel would just about fill my tank."

"Ok, I'll take care of it when we locate some."

They shook Jerry's hand, drove home, filled in the ditches and covered them with sheets of 1-inch OSB, then spent the next two weeks scavenging from the surrounding farms and ranches. They took everything they could use, because they didn't know how long it would be before they could resupply, and divvied up the supplies between the 4 households, and set aside stuff

for Jeremy and Natalie's house. Bret thought he had located a perfect house for Jeremy and Natalie just on the other side of Jim and Gloria's place - it was the one that had the broken tractor. The house was a fireproof combination of a fieldstone matrix core, stucco exterior and interior, and a fireproof composite shingle roof with PV shingles on the southern exposure. They must have been one of their more affluent neighbors, since they had a commercial grade kitchen with a propane-powered stove/range/oven combination, 2 2,000 gallon propane tanks that were mostly full, a huge masonry heater stove with a cooktop in the center of the living room, an Outback 10KW AE system, and 4 400-watt Air-X wind turbines charging a 300KWh battery bank. Their system was stand-alone and included a China Diesel 5KW generator in case they needed it. They had a 5,000 gallon diesel tank just like Bret, but both their vehicles were missing, probably because they were at work when The Big One hit. He didn't know where either of them worked, but vaguely remembered something about them working in downtown LA in the high-rises. From what Maggie told him, most of them collapsed during the earthquake, with few survivors. Anyone who survived the quake in downtown Los Angeles had virtually no way to get home, and soon would have to face rioting and looters, or just plain criminals who were willing to kill for what little they had. If they weren't back by now, they weren't coming back. Bret showed Bear the house he was thinking about for Jeremy and Natalie, and he agreed it would be perfect. Whenever they had spare time, they took care of the other house, and slowly got it to the point where Jeremy and Natalie could move in when they got old enough and married.

One of the big scores of their scavenging trips were several full or nearly-full tanks of gasoline and diesel they located. The tanks were too heavy to move loaded, so they off-loaded the fuel to the flat-bed trailer and 50-gallon barrels Bret had located at the first ranch. First they filled Jerry's diesel tank, which took about 150 gallons, then they put the rest in Bret's tank, filling it. He had already treated the diesel with Pri-D, so he knew it was good to go. Next they towed the tank over to Brad's house, since he didn't have a remote tank, and transferred the gasoline in that tank to 50 gallon drums, then filled the tank again with treated gas. They located 2 more tanks, and transferred the fuel to Allen and Natalie's house, and gave Jim and Gloria a tank full of treated gas. The house they were going to give to Jeremy and Natalie already had a diesel tank, so they topped it off with treated diesel from the other tanks. When they were finished, they all had a 500-gallon tank of gasoline or diesel, and they were full. Propane was another matter, and there wasn't a dealership nearby - the nearest one was in southern Glendale, and Bret said there was no way he was driving one of those rolling bombs all the way here in what was sure to be chaotic conditions by now. Leroy pointed out that it would take a 50-caliber rifle to even have a chance to penetrate the tank, and the tanks were over ½" thick. Bret pointed out that they might just try to hijack him, and either way he'd be dead.

Brad called a few weeks later, and asked Bret to marry Kelly and him. Brad was a minister, but it was considered poor form to perform your own wedding. Bret agreed to marry them, and they all gathered the next day for the wedding. Brad had coached Bret and given him a cheat sheet to follow. He did the wedding perfectly, and Brad told him he should have been a

minister. Bret laughed knowing he wasn't that spiritual, and didn't know the Bible that well. Brad said that now they had all the time, he should start studying his Bible. When he asked Kelly to marry him, he asked Zack and John if they wanted him to be their Daddy. Zack was now 7 and said "My Daddy's dead, but you can be my best buddy!" Zack and John each grabbed a leg, and Brad took that for a "yes". After the wedding, Zack and John stayed with Bret and Maggie, and Brad found out that the rumors of redheads being passionate were true!

They picked up the boys the next day, and Brad officially had a family. Kelly still wanted another kid or 2, and spent a couple of nights each week trying to get pregnant. Brad was more tired than he ever remembered. Finally, Kelly missed 2 periods in a row, and they announced she was pregnant. The next week Allen and Veronica announced they were going to be parents too. A month later, Jim and Gloria were expecting. Bret turned to Maggie, who said "Don't even think about it - we're too old!" Bret was glad they had plenty of baby stuff in stock between what Maggie had put back, and what they had scavenged from the store and their neighbors. They all had huge gardens, and by late summer, they were all busy harvesting and canning like crazy.

During what spare time he had, Brad was building a weird contraption made up from the Harley motor and transmission, and the differential, suspension, pickup bed, and front steering components from an Isuzu pickup, the hydraulics and loader off a Bobcat, and the wheels and tires off a wrecked ranch truck. Seems one of the "ranchers" places looked more like a wrecking yard than a ranch with old cars, trucks and other stuff accumulated. Brad was in "Hog Heaven" since he was a dedicated scrounger. Their final vehicle resembled a small pickup with huge 31x10.5x15 inch off-road tires, a small dump bed, and a small loader. The cab was open for the most part with a full roll cage and tubular frame, and a bench seat with seat belts. The hard part was mating the Harley motor to the rear differential of the pickup. Finally he spotted a bevel gear set in a housing with 2 4-bolt flanges, fabricated a mount, bolted the universal from the drive shaft to 1 end, and a steel plate to the other that had holes drilled to accept the pulley from the rear wheel of the Harley. He fitted the hydraulic pump and a tensioner idler pulley to the same bracket, and crossed his fingers. He knew the 3/4-inch steel plate would hold the torque, but he wasn't sure of the gearing. It turned out that the Harley's first gear was a 5mph Granny gear, and fifth gear topped out at around 40mph. Brad was amazed when he realized that the Harley had a custom transmission with a reverse gear, and took advantage of it. In order to have a decent fore-aft balance, he moved the battery and fuel tank up front, and covered them with sheet metal. He intended to give it to Jeremy and Natalie, but decided to use it on his farm until then. It was pretty powerful, and with the super-low gearing, had tons of pull-power. It didn't have a PTO, but that was a small price to pay for the extra gas mileage he got from the motorcycle motor. He knew it couldn't handle as much as the other trucks, but it could pull more than either tractor with the heavy duty receiver he welded onto the frame, with a ball and pintle combination hitch.

Chapter 13

Once the gardens were all harvested, and the horses, pigs, and chickens had their winter shelters built, they got a well deserved rest. Bret was listening to the multi-band radio when he picked up the NOAA weather report. It was weird, because he was listening to an AM talk-radio show, then he remembered his radio was equipped with SAME technology, so whatever was on the NOAA weather report was bad news.

"USGS has upgraded the Volcano Advisory Alert Level Two at Big Bear Lake, California to Volcano Alert Level Three. Numerous swarms of micro-quakes indicating magma movement and increases in steam levels and temperature at steam vents now indicate an eruption is imminent within the next 24-48 hours. The USGS has declared a Volcanic Emergency and has called for a mandatory evacuation of a 25-mile radius of the caldera, and a recommended evacuation within 50 miles. Persons to the east of the caldera from Northeast to Southeast within 200 miles are encouraged to evacuate to outside a 200-mile radius due to anticipated ash fall ranging from two to ten feet. National Guard units will assist evacuees and provide transport if necessary. This is an URGENT WARNING and state and local officials are authorized to take any actions necessary to protect life and property."

The warning started repeating, and Bret yelled for everyone to get into the living room where they could hear the warning. By the 3rd time through, he had the radio set up, the volume turned all the way up, and everyone in the living room. When everyone had heard it, they sat down and planned. They were over 100 miles west of the caldera, and weren't in the danger zone from pyroclastic flow or lahars. They could get anywhere from an inch to a foot of ash depending on the wind direction. Bret thanked God that it was close to winter, and the dominant wind direction was west to east, and a low-pressure system to their north should keep the ash off them. Even still, he called Brad and Allen, and told them to bring their families over for a group discussion. While he was waiting for everyone to gather, he called Jerry and warned him. Jerry told Bret not to worry about them, they had an underground shelter with 3 months worth of supplies, and a NBC-type air filtration system. All their animals had barns or other shelters that he'd put them in, and figure out a way to filter their air supply. Bret suggested several ideas he had, and Jerry said he'd be able to come up with something.

An hour later, everyone had gathered, and had heard the warning. Allen suggested they keep the animals in their shelters for the duration, or at least the first 24 hours of ash fall and feed them. Brad said they had several spare wind turbine generators from their scavenging trips and they could use 1 to charge a battery to run a 12vdc exhaust fan in the horses' barn on the other side of the fire road, and they could duct tape the door closed, and install a filtered air supply mounted high above the ash. Bret had exactly what he needed - several black ABS plastic Tee connectors and 6 foot sections of 4-in ABS plastic. They could cut a hole in the wall, attach the pipe to the wall, and stuff 2 two-foot pieces of plastic full of spun glass Aquarium filter

media which should catch most of the ash, and not plug solid for 24 hours. He had enough materials to build 1 for the pigs and chickens as well, which could run off the AE system. They all agreed, and got to work. First they took the time to seal their houses as best as possible in a couple of hours. Later that afternoon, Bret had the filters built and installed, while Allen and Brad got the wind turbine up and running. Jim and Leroy wired and installed the exhaust fans, and everyone else chipped in. When they were ready, Maggie helped herd the horses into the barn, made sure they had enough food and water for 2 days, then locked the barn, and sealed the door with duct tape to try and keep the ash out. She made sure the exhaust fan was running, and went to check on the chickens. The girls were busy getting the chickens back in their roost, so Maggie started herding the pigs into their shelter, set them up with food and water, and sealed their shelter. Finally the girls got the chickens up, fed and watered, then locked and sealed the door as well. Right when they finished, they heard a huge "Boom" and Bret got on his radio and ordered everyone inside his house, which was set up to handle something like this. Neither Brad, Allen, or Jim's houses were built to filter out ash. They had closed all their doors and windows and sealed them as best as they could before they left to take care of the animals, and packed enough stuff for a week.

"Ok, everyone, we should only need to be in here for the first 24 hours in case NOAA is wrong, and we get hot ash or pyroclastic flow this far west. We've done everything we can for the animals, now we just have to make arrangements for the next 24 hours."

Jim and Gloria volunteered to sleep in their tent in the basement, and Bear said they had 2 tents as well. Bret knew they had plenty of room, but realized the couples might want some privacy. An hour later, they heard what sounded like hail on the windows, and they looked out the window, and it appeared to be snowing ash, and what sounded like hail were small pieces of pumice stone. Bret checked the thermometer, and the outside temperature was still what it was before the ash shower started, so he felt safe knowing that if they were anywhere near the pyroclastic flow, the air temperature would go up drastically due to the hot gasses. After a couple hours when things died down, Bret suited up in a Tyvek suit with a hood, heavy rubber boots, and an Israeli Surplus gas mask, and went outside to check on everything. There was only an inch of ash on top of the hill the house was dug into. His house was built to withstand a near-miss from a 500 pound bomb, or a nearby nuclear explosion, so an inch of ash wasn't going to phase it. He cleaned the solar panels off with compressed air, and checked on the horses, chickens and pigs. Their filtration system was working fine, and they weren't getting much ash, so they'd be ok in a couple of days. He went back inside the house, stopped in the mud room, took off the tyvek suit and boots, which were covered with ash, and hung them up for later. He gave Maggie the good news, that the ash fall should taper off in a day or so, and everyone would be OK to go outside wearing a poncho, goggles and a filter mask to protect their airway.

With that out of the way, he called up Jerry to check on him, and he said that they were fine, the animals were in their shelters, and he and the missus were playing cards. They agreed that

it should be safe to go out in 24 hours if nothing else happened. The next 24 hours seemed drag on forever. They weren't used to being cooped up so long, and the strain started to show the next morning. Finally Bret relented, and let everyone but the pregnant women outside for a couple of hours if they wore protective gear. He called Jerry, who said that they'd only gotten 3 inches of ash so far, and they were in the process of sweeping off their roofs. He reminded Bret not to wet the ash down unless he had a steeply pitched roof, because wet ash weighed 10 times more than dry ash, and might collapse lightweight construction. Bret was glad he had bought all those push brooms, and they used them to clean off the shed roof of the pig sty, chicken coop, and horse shelter. None of the ventilators were plugged, and the animals seemed OK. The ash was still coming down, so instead of letting the horses out to graze, he fed them some more oats and hay, and refilled their water bucket. Everyone was busy outside cleaning ash off solar panels, windows, and roofs.

Finally Bret called everyone back inside with the FRS radios. They reluctantly agreed, and they all met inside. Bret checked his multi-band radio, and the NOAA weather broadcast indicated the eruptions had stopped, and the ash should move off within 24 hours as the onshore wind blew everything eastward. The good news was they were supposed to get a moderate rain shower tomorrow, which should wash all the ash off the grass, so they could let the horses out to graze. Right after dawn, it started raining, and it stopped around 3pm. Bret and Maggie let the animals out, then everyone drove their vehicles back to their houses. Bret made everyone wear masks and goggles when they entered their houses. Allen and Veronica's house was almost airtight, so a quick vacuum with a shop vac took care of most of the ash around doors and windows. Jim and Gloria had a little more work to do, so everyone pitched it, and got it clean enough for them to safely spend the night without wearing filter masks.

Bret was thanking God that they had come through a major volcanic eruption without anything more than a minor inconvenience. He wondered how the rest of the country was handling it, and turned on an AM Talk Radio show. The news was not good. FEMA wasn't prepared to handle a multi-state emergency of this magnitude. Besides that, a USGS Geologist was wondering aloud if Mammoth Mountain, the Long Valley Caldera, and possibly Yellowstone would be effected by the recent eruption at Big Bear. That got Bret's attention. If Yellowstone blew up as a Supervolcano like he had been hearing about on the Internet, he would need to borrow Bear's REM album, because it would be The End Of The World As We Know It. He could remember singing the song in the late 1980's, not realizing that 20 years later, he might be singing it for real! He wondered what Michael Stipe was thinking when he wrote the song.

The next morning Bret realized several things. 1) He had 3 pregnant women in the compound, and they were sorely lacking on Baby supplies, just diapers and cleaning supplies, and a limited supply of food and clothes. 2) The ash fall had stopped, and hopefully the Sheeple had acted like the good Sheeple they were and evacuated a much greater area than was necessary, possibly leaving Glendale a ghost town. 3) If he hustled, he might be able to "salvage" baby food, supplies, and clothing from nearby abandoned stores. 4) The ash was making him replace

air and oil filters more frequently than he planned on - he needed more Auto Parts. 5) He needed as much Diesel fuel and Pri-D as he could get his hands on. 6) Jeremy and Natalie would eventually need a vehicle - he'd have to keep his eyes peeled for a big running Diesel truck. 7) They all could use more Bug Out Gear in case they were forced to evacuate the mountain.

With that in mind, Bret decided that they needed to do a Scavenging Run ASAP. Since Allen was now a man, he didn't have to worry about Maggie insisting he stay home with her for the trip. He was needed because Gloria was too pregnant to safely scavenge, or even be out in the ash and dust for as long as this trip was going to take. He also decided to ask Brad to join them, and make it an armed convoy including him and Allen, Bear, Jim, Leroy, and Brad. With 3 vehicles (Both Dodge trucks and Babe) they would have a driver and gunner per vehicle, and 3 vehicles that could tow over 10 thousand pounds each. Bret talked to Maggie, who wasn't happy about them going out again, but agreed that they needed all the stuff on his list. Bret talked to Leroy, giving him a choice of trying to disarm the anti-tank mine in place, or destroying it. Leroy said he'd feel safer destroying it. Bret called Brad, who agreed, and suggested a shotgun slug from the bluff overlooking the fire road would be the safest way to detonate the mine. The 1oz slug hitting the pressure plate should have enough energy to detonate the mine, then they could quickly fill in the hole, and place a piece of OSB over it until they decided to permanently fill in the hole, or place another Anti-Tank mine in the road.

Bret assigned Brad and Leroy to destroy the mine and fill it in while he let his fingers do the walking. He grabbed his local Yellow Pages, and made a list of the places they wanted to visit. He located a Kragen Auto parts in Altadena, that was on their side of the 210 Freeway, so he added it to his list - they should carry a good selection of auto parts. He looked in New Dodge Dealers, and they all were in the wrong areas, across several freeways from them. He checked the Used Car listings, and found Banner Auto Sales in La Crescenta, which was on their side of the 210 freeway. He'd check them first for diesel trucks. He was thoroughly discouraged by the lack of fuel distributors in the area. The only thing he could think of was the Bob Hope Airport in Burbank, on the other side of I-5 from Glendale, but it was only 12 miles away. If they could find a fuel truck, locate a large quantity of diesel fuel, and drive it back, they could fill all their tanks full of diesel and gasoline. He knew where he could locate a couple of 1,000 gallon trailer tanks at the Caltrans yard, and possibly snag several diesel work trucks from them as well.

He checked the Grocery Store ads, and realized there was another Ralph's in La Crescenta with a Vons Market right down the block. Between the two, he should be able to come up with all the food and supplies they'd need. He made a list of where they wanted to stop, and then he prioritized it, then organized it so they wouldn't have to double back, or drive all over town. Their final stop would be the Bob Hope Airport in Burbank, if they couldn't locate a fuel

tanker and some portable tanks anywhere else because it was so far away, and driving a fuel truck that far could be suicidal. He showed the list to Maggie, who made some suggestions, like converting the route into loops so they could drive back home and unload after hitting so many places. Bret knew that he married her for more than her looks. She was one smart cookie. He re-organized the stops into 4 big loops, and then called Brad and asked if he'd be willing to ride shotgun for some scavenging trips over the next couple of days. He explained his reasoning, and Brad agreed that they needed more stuff with 3 pregnant women in their group, and Natalie a later possible 4th. He volunteered to build a pintle mount for his machine gun to mount it on the hood of Babe so Bret could drive, and Brad would have a limited field of fire while he was seated. He would design the mount so he could quickly detatch it, and fire out to the passenger side if necessary. Bret thought that was an excellent idea.

The next day, they hitched the biggest trailers they had to the two Dodge Ramchargers, and a smaller one to Babe. Everyone was wearing their bullet-resistant vests and their LBV's full of ammo and grenades. They weren't expecting Trouble, but Bret knew that Trouble had a knack of finding you at the least opportune moment. Maggie gave Bret a big hug, and told him to be careful. Bret drove Babe with Brad riding shotgun with his M -60 on a pintle mount, and Bear drove his Dodge Ramcharger with Allen riding shotgun with a M -16/203 combo and a LBV full of 30-rd mags and 40mm grenades. Jim drove Bret's Ramcharger with Leroy riding shotgun with another M -16/203 combo. Both Ramchargers were towing huge trailers, and Babe was towing Jim's smaller trailer for now. Leroy had already destroyed the anti-tank mine, and Brad filled in the hole, and covered it with OSB plywood so they wouldn't sink in. They made great time to the 210 freeway, then headed to their first stop. They took some side streets to Foothill Blvd northbound to La Crescenta, and started working their way north. 2 miles north on Foothill, they came to the Ralph's. It looked damaged, but un-looted. The only way to find out was to drive around the back. The rear door was off it's hinges, but looked like earthquake damage instead of vandalism.

Way in the far corner was a Tractor-trailer combo with a single long trailer. Bret grabbed his FRS radio, and held a quick conference with Bear and Jim. They agreed it was worth the effort to get a whole trailer full of stuff if they could get it running. Bret reminded them they needed to make sure there was a trailer full of stuff in Ralph's that was worth taking. He pulled Babe up to the loading dock, left the engine idling while Brad kept watch with his machine gun. Bret carefully opened the door, and was amazed that there were still hundreds of cases of food on pallets in the back of the store. He ran through the back, and the front of the store was a mess, and looked like it had been very poorly looted. He turned down 1 aisle, and saw the dead body of a teenager with a couple of cans of food. Bret shook his head, and turned to go back to the back room. He got on the radio, and gave them the good news. Brad drove over to the 18-wheeler, picked the door and ignition locks using Bret's electric lock pick, and tried to start it. The engine tried to start, but wouldn't turn over, so he opened the battery compartment, pulled Babe up to it, and connected the jumper cables. He was glad that the rig was 12 volt instead of 24-volt, and the truck's charging system should be able to provide enough power to start it.

He turned the ignition to on, and this time the Kenworth spun and roared to life. He hopped out of the cab and disconnected the jumpers, leaving the rig to idle. Once he had Babe parked, he carefully backed the trailer up to the loading dock, where Bret was waiting with about a dozen of pallets of food, medicine, and supplies. They used the pallet jacks to load the trailers, then once they were full, Brad drove the rig back to their house, and unloaded. They made 2 more trips to empty all the pallets they wanted to take from Ralph's. On their final trip of the day, the huge Kenworth suddenly swerved to the left and stopped. Brad got out swearing a blue streak.

"Now I know why that truck was sitting there - that front tire was bad. I hope to God they've got a spare."

Muttering to himself, he checked, and underneath the trailer was a spare tire. That was good news - the bad news was he couldn't find a jack to pick up the front end to replace it. He explained the problem to Bret, who said he could get a 10-ton jack, and a heavy duty air impact wrench from work. He hoped the compressor on the truck could keep up with it. Bret was back an hour later, and took a look at the tire, and said "Brad, that spare's a Bias-ply!"

"So?"

"That's a REAR tire. You can drive with it up front, but not fast, and not for long - we need to find another front tire somewhere if we plan on keeping this rig."

"Ok, just go ahead and put it on for now - I'm sure there's a tire dealer around here somewhere with the right kind of tires."

Brad and Bret worked feverishly to get the truck jacked up, and the wheel off. They had to wait almost half an hour for the reserve tank to fill up again so they could torque the new wheel back on. It took them almost half an hour just to muscle the tire and wheel into position, and hand-tighten the lug nuts down with a huge socket wrench. Finally they were finished, and Bret gunned the lug nuts down to around 200 foot-pounds, which was the maximum for that impact wrench. He checked the air pressure in both front tires, then the rear tires. The fronts needed some air, but the rest were OK. Finally they put everything back together, and Bear started the truck up again, drove the loaded truck home, and unloaded it before dinner.

Between the 3 trailers and the tractor/trailer combo, they had managed to unload every pallet, and all the useable cases of canned foods, supplies, and staples out of the Ralph's. They had over 70 pallets full of cases still in the shrink wrap, and over 100 cases of loose boxes where they had already broken down the pallets at the store, so Bret decided to take loose cases and put them in the three trailers to save room in the 45-foot trailer. Jeremy and Natalie were going to help the women relocate and repack the cases while Bret and the rest of the men went out to scavenge some more.

Chapter 14

The next morning everyone was up at first light, showered and dressed. Maggie made a quick but filling breakfast for everyone of oatmeal with brown sugar and raisins in case they didn't have time for lunch. She kissed her husband goodbye as they left, and they were back in La Crescenta within an hour with their 4-vehicle convoy. Leroy moved to Bret's vehicle to man the machine gun, while Brad drove the 18-wheeler, Bear drove his truck, and Allen drove his dad's Ramcharger with Jim riding shotgun. They made it to the Von's shopping center without incident, drove around the back, and found the place locked up tight. There were no lights on in the building, so Brad carefully picked the lock, and everyone but Leroy went with Bret carrying either suppressed Mac-10's or H&K MP-5SD's. They didn't want to make any extra noise, so they left the M -16 combos in the truck with Leroy watching the vehicles carrying the M -60 using the sling in the assault position. He liked the way the old broad balanced, and wished he'd have had one of them instead of that wimpy 5.56mm SAW the Marine Corps issued in Desert Storm. Leroy kept a sharp lookout, and everyone had their radios on to broadcast a warning if they spotted anyone, Bret was the first through the door, and they stacked right behind him and moved as a group just like a SWAT team. Leroy's training class in room clearing tactics suddenly came in handy as they tried to safely clear the building before they took everything that wasn't nailed down. Half an hour later, and several nervous moments later, Bret sounded the "All Clear" as they cleared the upper office rooms. The store was deserted, locked tighter than a drum, and the shelves hadn't been touched, so no one had been in there looting. There was stuff on the floor, and broken glass containers, but the shelves weren't bare like they were at the Ralph's. Maybe looters didn't shop at Vons?

They went back out, backed the trailers to the loading docks, and quickly emptied the loading and storage area in 4 trips. This went much faster than the Ralph's since they didn't have many open pallets to load by hand. Bret made an executive decision to come back for a 5th load of all the open cases of canned goods and supplies they could find. They loaded up the 3 trailers attached to the pickup trucks, and left a little over an hour later. On their way home, Brad was looking down side streets, and spotted a gas station. He looked again, and it looked like a double trailer fuel hauler was parked in the back. He broke squelch twice and said "Follow me - I found something." He made a right at the next corner, and drove back to the gas station. They parked and checked out the fuel truck. The front tanker was mostly full, and the back piggyback tank was almost totally full of diesel. If Brad guessed right, that was almost 5,000 gallons of diesel fuel, plus whatever was in the front tanks. They didn't want to leave any of the trucks loaded with stuff there, so Brad suggested he drop the empty Ralph's trailer next to the fuel hauler, uncouple the other diesel, which was out of fuel and wouldn't start anyway, and hook his running tractor to the fuel tankers and drive them home. They'd come back tomorrow for the trailer, and maybe the other tractor if Brad could get it running quickly. He unhooked the brake lines from the trailer, lowered the outriggers, and disconnected his 5th wheel, then slowly drove out from under the Ralph's trailer, then backed up and connected to the fuel

tankers. He connected the brake lines, and raised the legs. He put the Kenworth in low, and slowly rolled forward until he had both trailers moving, and was sure they were connected properly. Bret drove ahead of him, and led the way back home. Allen took up the tail end Charlie of the convoy, and paid close attention to his rear-view mirrors. It took a long time to get the dual-tanker fuel hauler home, but they made it right after sundown. Bret showed him where to park the tanks so they wouldn't have to move them too much, then Brad disconnected the trailers from the rig so he could get the trailer, and maybe the other tractor unit first thing in the morning. Finally when everyone was finished, he opened the fill caps on top, and used the tank stick to check how full the tanks were. There were 3 tanks up front, and all 3 were halffull of various grades of unleaded gasoline, and the rear tank was almost full of diesel. Checking his numbers against a sheet he found in the cab, they had 5,350 gallons of gasoline, and 4,875 gallons of diesel in the tanker. When he told Bret how much fuel was in the tanker, he decided to skip the fuel tanks, and check the Caltrans yard for anything else useful, like a big diesel truck for Jeremy and Natalie.

The next day, they drove back to the gas station, picked up the Ralph's trailer, and Brad spent an hour trying to get the diesel started. Finally he emptied the fuel tank, put 10 gallons of diesel in the tank from his side tank, found a can of ether, and shot a squirt into the intake while Allen cranked the ignition. On the second try, the engine caught, and rumbled. Brad gave it another shot of ether, and it started running better. Brad closed the hood, transferred 10 gallons to the saddle tank of the other diesel, then they pulled up to the pump to fill the other rig. Bret brought his 5KW generator with him, and while Brad played with the other diesel, he located the power terminals for the pumps, and managed to get the pumps running. The station sold diesel, so they filled the saddle tanks of both rigs, and the fuel tanks of all their trucks out of the station's tanks. It took a couple of hours to fill all the tanks, and they sat nervously on guard, but never saw anyone. Finally they were finished, and the station's diesel tank was almost dry. Bret disconnected his generator, put it back in the trailer Babe was pulling, and they drove off to their next stop on their scavenger hunt. They turned northwest up Foothill Blvd to check out the Kragen Auto Parts store. Bret had a huge list of stuff they wanted, and he hoped it hadn't been looted. When he got there, they had a loading dock, so they backed up to it, then unlocked the loading bay door, and spent the next couple of hours loading oil, filters, additives, parts, several cases of PRI-D and PRI-G - at least 10 times what they needed, and all the tools and miscellaneous stuff they thought they could use. Bret checked the list, and there were 2 Medical Supply stores within a mile of the Kragen, and they had the room, so they went to them next. They took everything they could use, and filled the trailer of the 18-wheeler.

Bret checked the list, and they could stop at the Sport Chalet at 975 Foothill Blvd on their way home. He hoped the underpass on Foothill was open, or they'd have to go around on the Angeles Crest Highway. He knew the route was open that way, and grabbed his FRS radio, and told the convoy they would take a slight detour to take advantage of a known open route across 210. They turned north on La Canada, and made the 2nd right back onto the Angeles Crest Highway. Bret turned onto their "overpass" and they all made it through without too

much effort. Bret knew that they might need to hook Babe to the Kenworth like they had done before to get over the inclines on either side of the freeway overpass With Babe pulling in granny low, the truck made it easily the last 3 times they did it. They stopped at the Sports Chalet, and took what they had - they didn't sell guns and other weapons, but they had great hiking, camping, climbing gear, and clothing. They loaded the pickup's trailers and what spare room there was in the Kenworth's trailer, then headed home. Maggie was overjoyed to see so much medical supplies, but doubted the usefulness of some of it. The outdoor clothes, polypro underwear, boots, and heavy jackets would come in handy, since no one thought to include winter gear in their emergency kits except for Bret. It took everyone several hours to unload everything, then they sat down to dinner and went to sleep soon after that - totally exhausted.

Bret decided to take the next day off, and get organized. Maggie had made an inventory program and spreadsheet, and had entered all the food and supplies into the list, and was in the process of issuing supplies to Brad, Allen, and Jim's families since Bear's family was still living with them and using the supplies stored there. When it got cold, they took 2 available bedrooms in Bret's house, and closed up the trailer for the winter, which was getting cramped and cold. Bret was worried when he saw how much power they were drawing off his system just to heat Bear's trailer, and suggested they move in with them for the winter. Bear took him up in a heartbeat. While everyone was recuperating from the heavy work of the last couple days, Bret updated his list, and made some notes to himself. Tomorrow, he wanted to check out the Caltrans lot in Glendale near his shop, check his shop again to see if they missed anything, then hit a couple of stores in the southern end of Glendale if they had to. He wanted to locate some Compound bows and arrows to save ammo, and keep the noise down when they were hunting. He knew in a year or so, the resident deer population would be booming, and they could safely take as many deer as they wanted to supplement their meat lockers. He checked the Yellow Pages, and the closest Archery store was in Monrovia. He'd either have to check some sporting goods stores in Glendale, or wait until later for the archery equipment. He looked under sporting goods again, and spotted Landry's Sporting Goods in Montrose, which was just north of the college. He could hit that on his way to the shop, then check the Caltrans lot after that. Hopefully Landry's carried archery and other hunting equipment.

The next day they drove down to Landry's, and hit the jackpot. The place hadn't been looted, and was full of firearms, archery equipment, outdoor gear, and other stuff they could use. Bret decided to clean out the store since they had the space in the trailers. 6 hours later, they headed home, the 18-wheeler was full, and the trucks and trailers were full. They even took the furnishings, florescent lighting, fixtures, spare ballasts, and a case of tubes. Bret thought the name was familiar, then realized where he had heard it. Mr. Landry liked to take his long lunch breaks at Venice beach, and leave the store in the hands of his son. Unknown to Mr. Landry, Mike shut the store down for an hour for lunch, and was probably at Del Taco when the quake hit. Bret didn't feel too badly stripping the place when he remembered the news story about Mr. Landry being found guilty of soliciting a 13-year old girl for sex at Venice Beach.

As they got almost home, the road buckled and swayed. Everyone stopped in place to wait out the quake. When the shaking stopped, Bret talked it over with everyone, and decided to scout ahead. 2 miles up the road, a small bridge over a dry creek bed had finally failed. There was no way the Dodge Trucks or the 18-wheeler was making it across that gulch. He drove back, gave everyone the bad news, and suggested they make camp. He would drive back into Glendale to check the Caltrans yard for any heavy equipment and bridging materials they might have so they could get home. They pulled the trucks so they were blocking the road in front and behind the Kenworth and set up a defensive perimeter. Allen was grateful that Maggie had insisted they pack their E&E kits, but wished he'd brought his BOB with the tent and sleeping bag. Laying on the ground in a Mylar bag wasn't Allen's idea of fun. They each took a 4-hour watch from dusk to dawn, and the next morning Bret showed up with Brad, who was driving an old Army deuce-and-a half towing what appeared to be a Caterpillar backhoe loader. Brad told them it was the big loader, a 446D, and it should make short work of filling in the creek. The deuce and a half was the lot queen at the Caltrans yard because it only went 40mph, had a 6-speed stick shift and a dual-speed transfer case instead of an automatic, and was an open canvas covered cab with a 7-yard dump truck and a 10-ton PTO winch on the front. Bret told them he found it hitched up to the loader's lowboy trailer full of all the accessories for it. It took them until dark to get the truck running, so they decided to stay overnight in the relatively secure Caltrans lot instead of driving after dark.

Brad located a suitable spot to remove dirt and rocks from to fill up the hole where the bridge collapsed, lowered the rear ramps, started the Cat, and backed it off the trailer. Meanwhile Bret was disconnecting the trailer so they could use the dump bed of the deuce and a half to haul dirt and fill in the hole. Brad used the bucket to lift dirt and rocks by the bucket load, and dump it into the truck. When it was full, Bret drove the truck to the gully, backed it up, and dumped the load. Meanwhile Allen was giving his mom a progress report, telling her they should be home that afternoon after they got the gully filled and compacted. 3 hours later, the gully was full, and they used the bucket to start the compacting process. Once he had used the full downward pressure of the bucket, Brad had Bret dump another load of rocks on top, and re-compact it. They needed a solid roadbed for the 18-wheeler to make it across. Once they were finished, Brad took some bigger boulders, and laid them on both sides of the temporary bridge, so it wouldn't wash away in the first rain. Bret knew they'd have to replace the bridge sooner or later, and added bridging materials to the scavenging list. Finally they were done around 3 o'clock, and Bret drove the deuce and a half over first, connected to Bear's truck just in case. He drove back and forth over the roadbed, compacting the whole width further. Finally Brad was satisfied that the Kenworth could make it, and they started over in convoy. Bret drove over first, backed up to the bridge, and connected his winch to the front of the 18-wheeler just in case. He anchored the huge deuce and a half to a couple of nearby trees just to be safe, then engaged the winch while Brad motored across in low gear. The tractor/trailer combo handled it just fine, and didn't need the winch. Bret unhooked the winch, waited for Bear and Allen to drive across, then re-connected his trailer, turned around and headed home. About 2 more miles down the road, Bret saw a tree blocking the road. He could tell it fell by itself by the way

the base was cracked and splintered, so he wasn't worried about an ambush, and got out, hooked a choker to the tree, and hooked the choker to his winch, and dragged the tree out of the way. They were home an hour later, and Maggie ran to Bret and practically picked him off his feet "You scared me half to death! I hope you're done scavenging!"

"Almost, Maggie Dearest - we need to get some bridging materials to build a permanent bridge before the next rainy season, or we'll be cut off."

"Bret, that might not be a bad thing - maybe you can find some temporary bridging materials you can use to cover the gap with when we need to. After all, you've already cleaned out the grocery stores and anything else we can use. We've got several years of fuel, food, and supplies now, and we don't need to go back to LA for anything."

"I forgot to get some fabric and supplies while we were out. Instead of buying clothes, if we got enough fabric and stuff, we could make our own. The nearest Wal-mart and K-marts are over by the Galleria, and I'm pretty sure they've been looted by now."

Maggie told him "There's Jo-Ann Fabrics & Crafts on Foothill Blvd. You've probably driven past it several times. If we could take Babe and the smaller trailer, the two of us could clean them out in an hour or so. I know what I need, you can do all the heavy lifting."

"Gee Thanks Dear! Guess this means you'll be riding shotgun - ever fired an M -60 before?"

"Yeah - Right!"

"I'll have Brad take it off, and we'll carry our M -16 combos instead."

"Works for me."

Before he left, Bret asked Brad to remove the M -60 and pintle mount from Babe. They were going to make 1 more scavenging trip to the fabric store in La Crescenta, then they were through. 5 minutes later, Brad had the machine gun removed from Babe with only 4 holes in the sheet metal where the mount went. Bret wasn't worried about holes anyway, so they were good to go. The next morning, they drove to Jo-Ann Fabrics and cleaned the place out. Maggie took all the fabrics they had in stock. She took all the sewing machines, spare parts, thread, needles, and notions, and anything else even remotely useful, then Bret boxed them up, and hauled them with a dolly out to the trailer behind Babe. Later that afternoon, Maggie said they had everything they could use, and decided to go home. Bret was glad, because he was dog tired.

Chapter 15

After the last incident with Big Bear, Bret was paying more attention to the USGS website, and what he saw did not make him happy. It appeared that his worst nightmare was coming true, 1 volcano at a time. He was reading reports of increased activity around Mammoth Mountain, which was the Southwestern border of the Long Valley Caldera that Interstate 395 followed from Crowley Lake to about 20 miles south of the town of Lee Vining, just south of Mono Lake. The really scary factor was the sudden increase in activity after Big Bear erupted. As he did more digging, he noticed previously dormant or inactive volcanoes were now showing activity, including Mount Shasta, Rainier, Lassen, Medicine Lake, and Mt. Hood. Even Mt. St. Helens was showing increased activity. The USGS wasn't ready to sound an alert, but the overall picture didn't look good, especially since they all increased activity after The Big One. All he needed to complete his doomsday scenario would be for Yellowstone to show increased activity, or something in the area where that Indonesian quake occurred last year to start rumbling.

He started working out his worst-case scenario, and realized that his family wasn't safe anywhere in the US if his worst-case scenario came true. He could either move or dig in. He owned the whole hill that his house was dug into, and he could expand his living quarters to accommodate everyone - but for how long, and would the food last? First he made a list of everything he'd need to blast and dig more space under the hill, and secure it against the massive expected earthquakes, then he made a list of all the supplies that they'd need to live 5 years without being able to grow anything outside. Finally he made allowances for the animals. 5 years of hay and oats would take up an enormous amount of room. The pigs and chickens weren't very efficient utilizers of the food they ate. At least the pigs could eat garbage, and their waste could be used for fertilizer and to make methane. He had some very hard decisions to make, and little time to make them if his hypothesis was right.

That night, before they went to sleep, Bret told his wife everything he was thinking of. She rolled over, turned on the light, and asked Bret how long he thought they had.

"Anywhere from 3 months to 3 years depending on how fast the geological dominoes fall into line. My best-case was that nothing further happened after Big Bear, but from what I'm reading on the USGS website, all the nearby volcanic regions showed increased activity right after the Big One, and again after Big Bear let loose. My Worst-case was that the Long Valley Caldera would let go, followed by Yellowstone letting loose as a Super Volcano. Judging by the size of the magma pool and the enormous gas pressure under Yellowstone, all it could do would be to become a Super Volcano. There's another Geologist that was theorizing that the Long Valley Caldera between Mammoth Mountain and Lee Vining might be a dormant super volcano as well. IF the worst case happened, we wouldn't be able to grow anything outside for 5 years, and the solar panels would quickly stop producing electricity. We don't have the

means of storing enough diesel to keep a generator running for 5 years, and the winds are too unreliable around here to produce enough power to make up the difference."

"How much diesel would you need to keep the hydroponic system running?"

"Good question, I'll crunch the numbers tomorrow, and figure out a bare-bones power consumption figure."

"You know dear, we can heat and cook with wood - why don't you include that into your figures. Or maybe you can locate a propane distributor and grab 1 of their delivery trucks - that ought to hold a couple thousand gallons of Propane."

Bret knew that Propane wasn't a big thing in Glendale, but if he went to the other side of the mountains via the Angeles Crest Highway, it dumped out near Wrightwood and Apple Valley. He hoped there would be propane distributors in that area with a 2500 gallon delivery truck.

The next morning, he went back to the USGS site, and located a report on the Yellowstone Caldera that said that if Yellowstone were to blow, it could only go as a Supervolcano due to the super high levels of dissolved gasses in the magma, being held in suspension by the intense pressure. Any release of the pressure would cause an explosive expansion in the neighborhood of around a million to one. The article stated the magma pool under Yellowstone was at least 30km by 60km but under intense pressure. He called Jerry and gave him the good news. They talked for a while, and Bret explained his problem with making enough electricity to keep the hydroponic system running for 5 years. Jerry said he had a friend in the Valley that was into steam engines, and he'd like to go see him, if Bret could give him a ride, and maybe he could get a usable steam engine to run a generator. Bret asked him when he wanted to go, and Jerry said "No time like the present - I can't get hold of him anyway to tell him we're coming."

"Ok, I'll be over in an hour." Bret decided to take Babe and the big utility trailer, which would be the easiest one to get a steam engine aboard since it had a tail ramp. He kissed Maggie, said he was going with Jerry to hopefully pick up a steam engine, grabbed a bag of silver dollars, and headed out the door. He drove over to Jerry's place, and Jerry looked at him funny.

"Expecting Trouble?"

"You never know WHAT we might run into between here and there." Bret was wearing his vest and LBV, and had his loaded M -16/203 combo in a rack between them. Jerry looked in back and saw a huge backpack full of stuff.

"What's that?"

"I brought a complete BOB instead of just my E&E kit. Like I said, you never know what we

might run into, and I might have to walk back home if I can. I hope your friend has what we need, I'm taking a big risk driving all the way out there."

"He's been into steam engines for as long as I've known him. If he's not there, I'm sure he wouldn't mind us taking what we need to survive."

They drove for 2 hours, and finally Jerry said "Turn here." Bret turned down the road, and turned again when Jerry pointed out the driveway. The gate was locked, so Jerry yelled "Hello the house!" Meanwhile, Bret turned all his radios on, and heard over CB channel 19 "Who are you, and what do you want?"

"Larry, it's Jerry - I brought Bret Wilson with me."

"Jerry, that you? I didn't know if you survived or not. Hang on a minute, I'll get the gate open."

"Larry, it's Bret, I can get the gate open without damaging the lock if you don't want to walk down here."

"Bret, go ahead, I'm not feeling too good today."

Bret got out, grabbed his electric lock pick, picked the Master lock in seconds, opened the gate, drove through, and closed the gate. They drove up to the house, and were greeted by a elderly man wearing an old-style train engineer's uniform. Jerry jumped out as soon as the truck stopped, ran up to his old friend, and shook his hand.

"Where's Mertyl?

"She died 6 months ago. We saw the Doctor last year. Seems smoking 2 packs of cigarettes a day for 30 years causes lung cancer and emphysema. Doc said I'm terminal too."

"Sorry to hear that Larry."

"Don't mind me, I've lived a good life. Mertyl's already in Heaven, and I'm fixin to join her. So why you two come all the way out here for - just to check on me?"

"Bret thinks the Long Caldera and Yellowstone are going to erupt in the next 3 years. Most of his place runs on solar panels for electricity, and if they put up enough ash, he won't be able to make enough electricity to power his lights for his hydroponic setup."

"Huh?"

"Larry - I built a home by digging into a hill. My Dad was really into Preparedness. When Grandpa died, he left me a ton of money, so I built a house that would withstand anything. Problem was I can't make electricity from sunlight if we don't have any sunlight. I'd need over 10 thousand gallons of diesel to generate enough power to run the hydroponic farm for 5 years, with not much left over. Jerry here tells me you're into steam engines, and I was hoping to buy or trade you for 1 so I can power a 20KW generator, which would be more than enough to run everything."

"Bret, I'm dying. Anything you guys need to survive, go ahead and take for free. I'll just ask you I favor. If you can, could you come back and bury me next to Mertyl when I die. I'll call Jerry on the HF radio when it's close. I'll show you were Mertyl's grave is then you can help yourself to anything you need here."

"Ok, If we can make it. Thanks for everything."

"Don't mention it - I'm just glad someone will get some use out of these old engines."

Larry got up, and Jerry and Bret each took an arm, and he led them to Mertyl's gravesite. He showed them were his headstone and casket were, then led them back to the house. They set Larry back down on the porch swing, and went looking through his back yard. Bret never realized how huge steam engines were until he was up close to them. The smallest one belonged to a tractor that was 12 feet high, 30 feet long, 10 feet wide, and probably weighed 10 tons. They walked back to Larry, who said, "That darn old tractor should run, it's just that it never went much faster than 5mph under it's own power. It's got a primitive transmission, so you can lock it in neutral and tow it with your truck. It skid steers, so Jerry's going to have to drive it back while you pull with that strange looking truck of yours. It sounds like a diesel, but it doesn't look like any truck I've seen."

"Babe's a specialty vehicle built for rock crawling. She will go anywhere, and climb anything smaller than herself."

"I know a man who loves his truck when he names it. I remember a few steam locomotives we'd named over the years."

"How tough would it be to convert the tractor to running a generator?"

"The whole thing runs on a big leather belt - I've got dozens of spares so take as many as you like. To run a generator, uncouple the belt from the tractor's drive pulley, and connect it to a pulley on the generator. I've got a bunch of belts and pulleys in the shed, please take them all."

Bret was wondering how he was going to get a 10-ton tractor home without leaving the trailer, when he spotted a pintle hitch on the back of the tractor. He had a pintle hitch connector on the

trailer instead of a ball so he could go off-road with the setup. Inside the barn, there were tons of belts and pulleys, and a huge heavy chain that looked like it was set up for towing. He backed the trailer into the barn, loaded everything including all the implements onto the trailer using Larry's chain hoist setup, pulled Babe around as close to the rear of the tractor as he could get it, muscled the trailer hitch onto to the back of the tractor, drove in front of the tractor, and connected the towing chain between Babe and the tractor. Jerry hopped up into the tractor seat like he'd driven one all his life (he had) and figured out the controls. This would be a long slow trip, but 10-20mph beat 5mph by a long shot. Bret was pulling between 15 and 20 tons, but he knew the engine and transmission could handle it. Jerry could do his own braking, so he didn't have to worry about burning out the brakes. They'd driven almost 30 miles to Larry's place, so it would take 2-3 hours to get home if they were lucky and didn't have any complications. Just to be on the safe side, he looked around the barn, and spotted another tow chain, and threw it on the utility trailer. Once they were ready to go, they drove up to the house, and Jerry radioed Bret to stop. Jerry jumped down out of the tractor, ran over to his friend, and bid a tearful goodbye. 15 minutes later, he climbed back up and said "let's go."

Bret knew from experience to break out the tractor in granny low 4wd with the hubs and front differential locked, and slowly build up speed. They stopped at the gate to unlock and open it. Once they were clear, Bret ran back and locked it. It took forever to get to the main road, but finally they were on hard surface, and managed to speed up to 10mph and unlock the front differential. Once they crested the grade, Bret had an idea, and called Jerry, who agreed. Jerry stopped the tractor and set the brakes, Bret disconnected, and reconnected the chain to the rear of the tractor to help slow the rig down going downhill by using compression braking. As Jerry released the brakes, Bret could feel the tension being taken up in the chains, and slowly released his brakes with the transmission in low. They slowly sped up to 10mph and crawled down the hill as slowly as they crawled up. Bret thought "man this is going to be a long day!"

Finally 4 hours after they started, they made it to the fire road. Right after Bret had hooked Babe up to the front of the tractor, and started pulling, he heard a "Bang" and felt the tension give as he suddenly lurched forward. He stopped and got out to investigate. The 2" forged-link towing chain had finally parted in the middle. He was thanking God he had wrapped the chain with the spare broken leather strap he found in the barn, it probably saved his life. That chain was under almost 20 tons of pressure when it parted. Jerry climbed down, asked him what had happened. When he told him the chain had broken, they debated driving the tractor the rest of the way under it's own power until Jerry realized it would take over an hour to build up enough steam to have the tractor move under it's own power. They were only a mile from Bret's house, and Bret told him he had a spare chain, but it was lighter. Using the remains of the broken chain, they connected the rigs together using a double-chain setup, which was shorter, but less likely to break. Bret climbed back aboard Babe, and pulled him up the fire road in Granny Low 4-wheel drive. It took almost an hour to make it home from there, and by the time they dragged the tractor into the yard, everyone was outside looking curiously at it. Finally Bear said "You didn't tell me you were coming back with a steam locomotive!"

"Real funny Bear - according to Jerry's friend Larry, all steam engines are big. The locomotives he had were 2-3 times the size of this tractor, and those were small yard engines. We need to get the generator head off that old military diesel generator and connect it to the steam engine of this tractor."

"Why not just run the military diesel?"

"I guessed that the effects of my Worst Case scenario could last up to 5 years. Running that big 20KW generator for 5 years non-stop would burn 10-20 thousand gallons of diesel. Frankly, I'd rather harvest enough wood for the steam engine and our wood stove than risk running out of diesel. The trees will grow back. Once we're out of diesel, we're out. Besides we could later use the tractor to plow fields instead of horse-drawn equipment. Also, I spotted a Propane dealer on our way back home - it's amazing what you can see when you're driving down the road at 10 miles per hour."

"What's that got to do with anything?"

"I've got a spare propane burner, pilot light, and regulator from an old water heater that I can rig up to act as a back-up heat source for the boiler if we run out of wood, or can't get any for some reason."

"Also it would speed up getting the boiler up to temperature instead of waiting until the fire got hot on its own, we could turn on the propane and accelerate the process."

"Not only that, but it would really stretch out the propane. If you rigged the propane to come on automatically if the batteries got low, and another thermostat switch to cut the propane when it got up to operating temperature, we could feed the boiler in the morning, or let the propane kick in if there's too much ash or snow to go out. The generator's got an autostart function anyway, and we could connect that to a solenoid switch to open the gas valve, and another solenoid switch to close the valve at a preset temperature."

"Wouldn't you need a timer somewhere to keep the generator running long enough to charge the batteries fully?'

Here's what I'd do. The first solenoid is connected to the low-voltage autostart, and is on a timer. Once it opens, it stays open as long as the timer is set, the second solenoid opens and closes based on the temperature of the boiler. The propane would cycle on and off as long as the timer had time left. Once the timer ran out, the fuel wouldn't kick back on until the battery was discharged, or the load was greater than the batteries could handle. If we were feeding it wood, the second solenoid wouldn't open, and we'd be running solely on wood heat. If stopped or forgot, and the autostart started, the propane would open and heat the boiler."

"The water heater should have a thermostatic solenoid on it - maybe we could use it?"

"I don't know what temperature the solenoid works at. I'd need it to shut off at 250 degrees."

"The thermostat is nothing but a switch, I'm sure I could fix it to work at that temperature."

"Make sure the temperature solenoid is normally open - the other solenoid would take care of everything else."

"Let's check that thermostat, and find out if it's a single or double contact thermostat. The double-contact thermostat would keep the water hotter, but burn more propane. The single-contact one would give you wider swings in temperature. Hopefully it's a single."

"Even if it's a double, we can wire it as a single-contact, right?"

"Duh!"

"Ok, that's solved - so when are we going to get the propane?"

"Let's go tomorrow - I'm pooped!"

Chapter 16

The next morning, Bret and Leroy drove Babe, and Bear and Allen took Bear's Dodge Ramcharger. Bret had Brad's M -60 mounted again, and Bear was pulling the big utility trailer. They made great time over the hill, and a little over an hour later, pulled up to the gate of the propane company. The building appeared to be deserted for a long time judging by the dust on the vehicles there. They had a huge delivery truck, and a utility truck with a hydraulic crane and a flat-bed trailer in the lot, so they checked out the delivery truck first, and the tank was almost full. Bret took out his electric lock pick, opened the office door, then the key rack for the trucks, and as a bonus, located the keys for the storage tank's dispenser system to fill the big truck.

Meanwhile Bear and Allen were looking around the back, and located dozens of 500 gallon tanks. They were small enough that they could load 6 of them at a time on the utility trailers, and the lightweight crane on the truck could pick them up easily. They put 6 on Bear's rig, then 6 on the trailer behind the utility truck. Bret found some useful stuff, including plumbing supplies he'd need to connect the tanks together, and connect them to his regulator. Bear had worked 1 summer at a Propane company making deliveries, so he topped off the delivery truck then got voted to drive it back home and fill the tanks after they got them situated.

Allen drove Bear's rig, and Leroy took the utility truck. They locked the gate on the way out, and drove back over to their place. It took them several hours to get the tanks located and plumbed, then Bear filled the tanks as full as he dared, about 400 gallons each. It really didn't get hot enough there to need a desert fill, but he wasn't comfortable filling the tanks to 100% of capacity either. They decided to go back the next day and take the rest of the tanks, and anything else they could use. They took the M -60 off Babe and gave it back to Brad since it didn't make sense to only be able to use it on the way out.

The next day, they both took trailers, and would stop anywhere they felt was useful on the way home. They brought back 15 more tanks of various sizes, or about 6500 gallons extra. They decided not to stop when they located the extra tanks, giving them over 11 thousand gallons of propane available. Bret convinced the rest of them to make 1 more trip, fill the tanker and bring it back with another 5,000 gallons of propane, and this time they'd stop at the ranches along the way and scavenge. They were specifically interested in antique farm equipment that could work with the steam tractor, or horse drawn, and checking the farms for seeds and livestock, or any specific equipment they might have. Bret hoped that someone had a good library, or a selection of tapes/DVD's and a big-screen TV because they might be stuck indoors for over a year. If he had time, he wanted to locate the local libraries and grab any how-to books and stuff they might need later. They had already scavenged some computers, but they could use some more laptops.

Jerry called the next morning, and said that Larry had died, and Bret told him that they were going out that way anyway, and if he wanted to come along for the ride, he'd pick him up in an hour. When he finished, Bret said "Change of plans - Jerry's friend Larry died, and I promised we would bury him."

"OK, we'll get the propane and clean out anything useful there, then meet you back at Larry's place."

"You don't know where he lives!"

"Leave Allen on the intersection off the main road, and tell him which driveway it is. It won't take me more than an hour to load the tank again and take what little stuff we left there."

"Ok, see you there."

They left a few minutes later, and Bret dropped Allen off on the intersection with his rifle, E&E kit, and a camelback bag. Bear continued on to the propane company lot. Bret left the chain unlocked last time, so Bear just opened it and drove on in. An hour later, he had the tank filled, everything useful removed from the office, and was heading back to Larry's place. Allen was sitting at the roadside with is thumb up. Bear laughed his head off, remembering the Summer he hitchhiked across California. He opened the door, and helped Allen in, then they drove over to Larry's place. They'd just gotten Larry into the pine box, and needed help getting it into the grave. Bret, Jerry, Bear and Allen picked it up and carried it to the grave Bret had dug with Larry's backhoe. They gently laid him in his grave with ropes, then started filling in the hole. Jerry stood there, then read the 23rd Psalm, and asked to be alone for a while. Bret and the rest of the guys took that opportunity to go through Larry's stuff. His barns and outbuildings were a treasure trove of antiques including farm equipment and other stuff. Jerry joined them a while later, and they went through Larry's barns. Bret offered Jerry anything he wanted, and he said "What, and have more junk to store! I've already got enough junk for 2 junkyards. Take whatever you want!"

Over on a workbench, Bret opened the drawers, and decided that Larry had a nice collection of old hand tools including chisels for both wood and metal, all kinds of planes, files, rasps, knives including a couple of drawknifes that Jerry said were for making wagon wheels and other items like that. Bret boxed them up and put them in the bed of the vehicles. He walked back into the barn and noticed all kinds of machinery. On the left was a belt-driven metal lathe, and next to it was a belt driven wood lathe - he could tell it was made for wood because it didn't have the screw feed for the tool. Behind it was a complete blacksmith setup including a nice anvil, all the old tools, and a propane-powered forge with an electric blower and a huge exhaust hood. Next to that were a couple of treadle operated sewing machines that Maggie would like, and one that looked like it was heavy enough to sew leather or shoes. Nearby, he found a whole tool box full of leather working tools. Hanging on the far wall was a bunch of

primitive 1800's era Lumberjacking and woodworking tools including a two-man saw, a one-man saw, a set of axes, adzes, and planers that Jerry said would be used for hewing lumber by hand. Jerry pointed out a diesel-powered sawmill with a 4-foot diameter blade mounted on its own trailer, and next to it was a hydraulic log splitter that could run off the same diesel motor just by flipping some switches. Bret thought it was ingenious, but he'd never seen a hydraulically powered saw like that before. He guessed it would be a great idea, and would have terrific power to spin that massive blade.

Bret started assembling stuff they wanted to take home with them, and stuff they could come back for tomorrow or later. He used the chain hoist and gantry to lift the heavy stuff and set it on the trailers, and once they were full, they switched to the house. Most of the contents of the kitchen and pantry they could come back for later. Jerry was in Larry's bedroom, when he called Bret "Look what I've found!

In a closet in a back room, they found several very rare and antique rifles including a very old European Drilling, a double -barreled rifle in .385 Weatherby. He also had a .455 Webley revolver in a satin case. There was a strong box in the bottom with a collection of rare gold and silver coins. Bret told Jerry to keep them.

"Bret, you take the coins, I don't have any use for them. The guns have sentimental value - I remember the last time he shot them when we were on vacation."

Bret looked at the coins, and just on face value, there was almost \$10 Thousand worth of gold and silver coins. Their numismatic value could be several times that much. "Are you sure, there's over \$10 thousand worth of coins here!"

"I never told you this before, but Larry wasn't the only 1 dying around here. I've got Hodgkin's Lymphoma, and maybe 6 months to live. Martha had a major stroke a while back, and I got her out of the nursing home right before the Big Bang hit. She'll die within a couple of days after I do, if she lives that long. Please take the gold - I've got no use for it. Just make the same deal with me that you made with Jerry, and bury us together on the lot if you can."

Bret stuck his hand out with tears in his eyes "Deal you old Codger you!"

Jerry smiled, remembering Maggie called him "Old Codger" every time she saw him. He remembered the first day Maggie floated into their house and announced she was engaged to Bret Wilson. Jerry knew the Wilson family, and knew Bret's father George personally. They used to go golfing together once a week when they were younger and in better shape. Maggie's dad Steve and Jerry went all the way back to high school. He was a wealthy contractor with 6 crews working for him. It was a darned shame when he died in his late 40's of a heart attack. Maggie adopted Jerry as a surrogate father, and she spent most of her last two years of high school hanging out with Jerry's family. That was how she ran into Bret. Jerry was a member

of the Country Club, even though he didn't golf much anymore, but he taught Maggie how to play.

One day Bret, his dad, and another friend of theirs showed up needing a fourth. The pro said that Maggie's handicap matched Bret's so they asked her to play. Bret was smitten by her beauty, and had seen her at High School, but never had the nerve to approach her. When his dad asked her to play golf with them, he thought he'd died and gone to heaven. Maggie had seen Bret around school, thought he was cute but shy, and never got a chance to say anything to him. George paired them up to share a golf cart, and while driving around the course, they hit it off so well that George kept asking Maggie to play with them instead of his other golf partner, who was unreliable anyway. After that summer, they were going steady, and Bret asked her to marry him on her 18th Birthday, after they had graduated High School.

She thought the "Big Deal" date at the fancy restaurant was just to celebrate her birthday until he took out a ring box, got down on 1 knee and proposed to her. By now he had 1 shop open, and was making enough money to support them. Their apartment was above the shop, so the rent was practically free, and she was working as a model, and bringing home good money. She looked at him, wordlessly picked him up off his knee, and laid a lip-lock on him that screamed "Of Course I'll marry you Darling!" When they came up for air, he nervously said "I take that was a Yes?"

"Of Course it was silly, now let's see the ring."

Bret extended the ring box, it was a pretty ring, but not a large one. Maggie didn't care, she would have married Bret if he'd given her a Cigar Band for a ring. He held the ring out gently, and slid it onto the 4th finger of her left hand, and she gave him an even bigger kiss. The next day, they went to see Jerry and give him the good news. Maggie's mom was in a nursing home by now suffering from Acute Pancreatitis caused by years of heavy drinking, and emphysema caused by years of smoking, and was totally bedridden and on oxygen. She smiled at them, and leaned forward so she could talk to the young couple, and motioned them closer.

"Maggie, I won't make the wedding, so I just wanted to give you two my blessing now while I can." She reached out with both hands, and held theirs while she cried. They both gave her a hug and wished her well, then the nurse came in to shoo them out the door. After they saw Maggie's Mom, they drove over to Jerry's house, and he could tell by the way her feet barely touched the floor it was good news. Bret's ear-to-ear grin confirmed his suspicions. Maggie asked Jerry if he could give her away since her dad was dead. Jerry snapped back to the present, and Bret was standing there asking him about the other guns in his collection.

"Take anything you need - I'll take a few sentimental items while we're here."

"We're going to have to come back a couple of times anyway to get everything we can use

here." Bret helped Jerry collect everything he wanted, then they loaded the trailers with what they wanted to take today, and drove home.

The next day, Bret decided to take everyone he could, and all the vehicles that could tow trailers, that included both Dodge Ramchargers, Babe, Brad's truck, Jim's Jeep, and Allen's old Jeep. Maggie and Nancy came with them, leaving Jeremy and Natalie to protect Veronica, Kelly and Gloria. Jeremy took his duties seriously, and watched as his Dad showed him how to detonate the Claymores, and how to run the radio. He said they'd call when they reached the end of the Fire Road, so he wouldn't blow them to Kingdom Come. Jeremy grinned nervously when his dad said that, then he realized that if he did accidently fire the Claymores when he shouldn't, he would blow them to kingdom come. Bret was glad Jeremy was sitting down, judging by the look on his face, he would have fallen down if he weren't already seated.

"Son, under the circumstances, we need you to grow up fast! Natalie almost died doing something that wouldn't have mattered 6 months ago. Now something as simple as getting bit by a dog can kill you. I wished you would have more time to grow up, but we're going to need as many adults around the house as possible. I've seen you and Natalie, and I'm proud of the maturity you've shown. As you continue to show me you can handle adult responsibilities, you'll get Adult privileges. Please think twice before you do anything around here. Some actions could possibly kill us all. Ordinarily, I'd have you and Natalie accompany us scavenging, but someone has to stay home and protect the pregnant women. They're the future, and if my worst case scenario happens, we're going to need to be fully dependant on ourselves for the next 20 years, which includes raising a new generation to help farm and defend the place as we get older."

Bret held his son for a moment, then ran out to get the convoy organized. Jeremy sat there at the radio bench, listening for any transmissions from his dad and occasionally glancing at the driveway buzzer and the remote detonator for the Claymores. Meanwhile the convoy motored down the fire road, and once they had cleared it, Bret radioed "All Clear, if you hear the buzzer before I radio you - it means someone that's not supposed to is coming up the fire road. Do what you have to, but protect the women."

"Right Dad, have a safe trip."

They drove as quickly as the could to Larry's old house. While the women stripped the pantry and kitchen of anything useable with Jim and Allen's help, the rest of the men went on a Scavenger hunt of Larry's property. The first thing they did was locate the trailer for Larry's backhoe they used to dig his grave. Larry also had a diesel tank, so they filled up everyone's vehicles so they could tow it back with them. When they found the trailer, Bret loaded the backhoe onto the trailer, plus any accessories Larry had for it. It was a smaller backhoe than his, so they connected it to Jim's Jeep, which could tow the smaller Kubota backhoe easily.

Maggie found a note in the kitchen behind a false panel in the pantry, and called Bret after she read it.

"Bret, you might get in here, according to this note, Larry's got stuff stashed all over the property in caches and other hidden spots."

Bret ran back to the house, looked over the map, and got everyone concentrating on locating the caches. When they located them, they varied in size from a Connex box to several bucket caches out on the perimeter of the property. They dug up all the bucket caches and put them on the trailers, and Bret used the backhoe to unearth the Connex box. Inside the 10 foot square box were a bunch of 30 caliber hunting rifles with scopes packed in heavy gauge plastic with desiccants and a light coating of gun oil. Next to that were 10 pounds of smokeless powder, and enough rifle primers, bullets and brass to make thousands of reloads. Next to that was a nice Dillon progressive reloader with 3 die heads. One looked like it was set up for .308/7.62 NATO, and the other for 30-06, and the third for 7.62x39. Bret knew that Larry had a nice setup. The rest of the conex box contained Food, clothing, medicine, 2 Bug out Bags, and a small bag full of gold and silver coins. They reloaded the contents into a box and loaded it on a trailer.

Between the Connex and the bucket caches, Bret knew Larry was into survival, and asked Maggie to check the basement more carefully. They walked down there, and checked every wall, and found a false wall. Maggie called Bret, who ran down to the basement, and spent an hour trying to figure out the false wall, when Nancy stepped on a board in a corner, and the wall slid open. Bret said "Thanks Nancy" and she gave a little bow then they went into the hidden room. It looked like a bomb shelter, and there were tons of useful stuff stored in it like a year's worth of nitrogen-packed long-term storage food, Geiger counters, 2 MOPP Suits, a dozen NBC filters for their gas masks, a small generator with 20 gallons of stabilized gasoline, a couple of Katadyn water filters, and a small armory including 2 SKS rifles, 2 Colt Commanders, and a Remington 12 gauge pump shotgun with an extended magazine. Underneath was a case of ammo for each weapon, 2 older style sets of Deuce gear, and 2 backpacks that looked like they were set up for extended Bug Out Bags.

Once they had located everything, they formed a human chain and loaded everything into the vehicles. Nancy thought the 2 huge canning sets with a dozen cases of jars and lids were the best score of all. When they left later that afternoon, every vehicle and trailer was loaded as heavily as Bret thought was safe for the short trip over the mountain. Bret thought they could come back later for the windmills, stock tanks, and some other big stuff since they were so big and heavy, and they didn't need them right now. Bret called Jeremy on the radio when they got to the fire road, and he was proud when Jeremy answered a second after he cleared the frequency. By now the fire road was dry enough that all the vehicles safely made it up the road to Bret's house, where they unloaded. When they were finished, Dinner was ready, and Bret invited everyone to dinner. It was real crowded, but after they brought out an extra table,

everyone fit. After dinner, Bret said he needed to talk to everyone.

"You've probably been wondering about this latest round of scavenging. I've been checking the USGS website after the Big One hit, and the news is not good. The Long Valley Caldera is active, and several dormant volcanoes to the north of us are suddenly showing signs of activity. This ordinarily wouldn't be a big issue, except they started getting active after the first quake hit, then when Big Bear let loose, the Long Valley Caldera really started acting up. The USGS thinks somewhere in the next 3 years, they could all erupt, either together, or over a period of months or years. My major worry would be if Yellowstone would erupt as a result of all the nearby tectonic activity. If the Long Valley Caldera let loose, it could release 750 cubic kilometers of ash. If Yellowstone were to erupt, it could release over 2,000 cubic kilometers of ash. That would be enough ash to bury everything within a 100 mile radius with up to 25 feet of ash. The main threat here is the Long Valley Caldera, since we're only 280 miles north of Mammoth Mountain. We'd get 2-3 times the amount of ash that Big Bear threw out, and the sky would be darkened for years, making growing food outside difficult to impossible. What I propose is that we build another building into the mountain big enough to house everyone that's currently living in the other houses here, and store enough provisions to last everyone 5 years. The steam engine will be used to make electricity for the Aquiculture setup and lighting. We need to find a steel building, or better yet, a huge Quonset hut, dig out enough dirt from the hill next to us to bury it, spray 6-12 inches of shotcrete on it for reinforcement, build a huge masonry heater/stove for heating and cooking, and enough rooms to house everyone comfortably. I need everyone's help here. We've got a bunch of stuff to scavenge, and little time to build if I'm right, and we still need to raise gardens to put away canned vegetables to last as long as possible. Our front yard is going to become a construction zone, so Bear will need to move his trailer to either Brad or Allen's house."

"Dad, they can stay at our place for now. We've got enough room."

"Ok, now anyone know where we can get about 10-12 cases of 40% dynamite, some det cord, and blasting caps?"

"What the heck do you want that for?"

"Once we get the overburden off, we've got to blast some rock to get a big enough trench to hold a 30x100 foot Quonset hut next to ours. 40% dynamite will break the rock without throwing pieces everywhere, or damaging our dome."

"Dad, why not call Jerry, he might know!"

"Thanks Allen, I was thinking of calling that old codger."

The meeting broke up with everyone in agreement. Brad and Bear figured that if Bret was

willing to risk damaging his home to build enough shelter to house them, he was pretty serious and concerned. Bret called Jerry on the radio.

"Jerry, I need some explosives to dig a huge trench, and a huge Quonset hut to set it in."

"What in God's name for?"

"I'm afraid this is just the start of a season of major tectonic activity, and I've been checking the USGS site, and there's a sudden increase in activity around the Long Caldera and several previously dormant volcanoes between here and Washington. That's bad enough in itself, but what if the activity causes Yellowstone to erupt?"

"Jesus, Mary and Joseph! That could spell the End of the World!"

"Maybe, but just in case it only lasts 3-5 years, I wanted to build another sheltered house next to mine to house Brad and Bear's families. We've got enough supplies, now all we need is a 30x100 Quonset hut, and enough explosives to blast some rock that's in the way."

"Larry was telling me they were mining just north of his place. You might check a map, and drive over there. If they were actively mining, they might have over 20 cases of dynamite, det cord, and detonators, plus some more heavy equipment to make the digging faster."

"Thanks Jerry - if you think of anything, please give me a call."

Bret talked it over with everyone and checked his maps. His USGS topo map clearly showed several mines to the north of Larry's place, and a mine road to get to them. They decided to take 2 vehicles with them and 4 men. Bret and Leroy would take Babe, and Bear and Allen would take Bear's truck, and they both would pull trailers. Brad volunteered to mount his machine gun on Babe again just in case.

Chapter 17

The next morning, they left for a quick survey trip. What they found made then come back with everyone who could drive a vehicle. There was a mine less than 10 miles from Larry's place that had been abandoned after the earthquake, and all the heavy equipment, explosives, and several huge tanks full of diesel were just left there. Bret knew with the explosives, monster loader, excavator and dump trucks they used for mining, digging a spot for the "room addition" would be a walk in the park. The bonus was when they located several suitable buildings on the property. All they had to do was disassemble them and move them. Bret and Maggie argued about using Kelly, Natalie and Gloria to drive until Gloria overheard them and said "I've got 4-5 months before I'm due, and even if I only drive a pickup, I can help." Maggie knew that Gloria had a point, but stipulated the women would have to volunteer, and their husbands had to approve. With the ash a distant memory, there wasn't as great a risk to their babies.

Bret called Brad and Allen, and explained the situation, they might only get 1 shot at removing all the heavy equipment before someone might notice all the equipment moving out, and wonder what was going on. They fully well intended to return the equipment when they were done, but the owners might not see it that way. Bret was convinced the owners were dead or had left, since it was almost a year after the Big One. Kelly surprised Bret when she told him that she used to drive haul packs at that very same mine, and was qualified to operate anything on the lot. She could drive any of the transports if they could get the equipment on the flatbeds they kept for relocating the equipment. She even told him where the keys to the vehicles were kept. Veronica agreed to drive a truck, and even Jeremy and Natalie would get a "crash course" in driving. Bret hoped that wouldn't be too literal.

When they got to the mine, and Kelly saw the size of the Quonset huts Bret wanted to use, she suggested instead of digging a trench, taking the whole side of the hill down, installing two 60 x 120 foot Quonset huts, 1 for the steam engine, and 1 for a shelter, covering them with shotcrete, then backfilling over them. That way, they wouldn't need the Excavator, and they could take the huge bulldozer and another loader instead. Bret was glad that Kelly had worked for the mine, because he didn't have a clue. She also suggested using the loader to pick up the Connex box they were using for a powder house, and set it on a lowboy and take the whole thing instead of trying to unload and reload it. Bret opened the powder house, and was amazed. They had over 50 cases of dynamite, tons of Ammonium Nitrite, and several thousand feet of det cord. Next to it in a smaller bunker was a box of blasting wire, several twist detonators, and a couple of boxes of electrical detonators in a shock/explosion proof box,. Bret commented that only an idiot would stick their detonators in the same area as the explosives. Kelly guessed they were in a hurry to leave, and get back to their families, so they stuck it in the closest secure location. Bret removed the box of detonators, and stuck them in the bed of Babe. He'd haul the lowboy with the explosives at the rear of the convoy, so if he went

"Boom" everyone else could still get home.

While the men started disassembling the huge Quonset huts, Kelly started loading the heavy equipment on lowboys while Brad got the tractors running. They grabbed a huge work truck from the mechanic's lot with a light crane, welder, fueling equipment and air compressor. They used several extension ladders, air ratchets, and impact wrenches to disassemble the components, and the lift to lower them to the ground and stack them. The Quonset huts came in 4-foot sections, so they had 60 sections to deal with. Working like Beavers on Speed, they had the buildings disassembled and stacked on a lowboy right before dark. Brad had all the vehicles running, and was able to help out for the rest of the afternoon, while Kelly gave the women a crash course in driving a diesel rig. They were taking 2 7-cubic yard wheeled loaders, a huge dump truck with a 21-cubic yard bed, and a large D-9 tracked bulldozer with a 10-foot blade. They filled all the equipment and topped off the hydraulics, then filled the 18-wheelers tanks to lighten up the tank as much as possible. Brad called, saying he had located a huge fuel truck, so they off-loaded the remaining diesel into the fuel truck and took it with them, after filling it as full as they could get it from the tank, then from the storage tank in front of the maintenance facility. When he was finished, Brad guessed they had over 5,000 gallons of diesel in the huge tanker.

Bret counted noses, and realized that if they wanted to get all the vehicles home in 1 trip, there would be no one riding shotgun, so he told everyone to lock and load, and call out if they spotted trouble. 13 drivers grabbed their M-16's, pulled back on the charging handles, then flipped the safety to "safe". In Kelly's vehicle, Zack was having the time of his life riding up front on the passenger seat of the big Kenworth while his younger brother took a nap. Kelly was glad that Zack and John had taken to Brad so well. They both called him Daddy, and Zack understood that he was soon going to have a new baby brother or sister. Leroy lead the convoy with the maintenance truck since it had a huge PTO winch on it. Next came Kelly, Maggie, Gloria, and Nancy driving the lowboy haulers with the heavy equipment. Jim was driving a huge maintenance truck with a hydraulic crane, welder, compressor, etc. to work on the heavy equipment, and towing an empty 5,000 gallon diesel tank. Brad followed with the fuel truck full of diesel, then came Allen driving a lowboy with the disassembled Quonset huts and the hardware. Veronica was driving Bear's truck with a Bobcat loader mounted on a lowboy with all it's accessories, including an auger and a rock boring drill that could come in handy if they had to drill and blast. Bear was driving another huge maintenance truck with the rest of the tools needed to work on the heavy equipment, Jeremy was driving a mixing/pumping truck and trailer with enough shotcrete mix to cover the Quonset huts, and Natalie was driving Bret's Dodge Ramcharger pulling the trailer with the fuel tank on it. Bret was far to the rear with the lowboy with the conex and the high explosives. Babe was up to the challenge to haul the heavy load. Bret just hoped he didn't sneeze, or he'd be strumming a harp.

Over the long trip home, he had a chance to think back over the time since the Big One. He realized how lucky they were. Once they had cleared the freeway, they hadn't seen that many

dead bodies or wrecks. The freeway was still packed with wrecked cars, it was just they didn't have to see the faces of the dead in their cars, so they mentally blocked them out. Once they got onto the surface streets, they had to clear an occasional accident or traffic jam, but after the first week, they were fewer and fewer. Once the volcano alert was issued, the streets were deserted - probably because the survivors fled North and South to get away from the Volcano, even though they would be perfectly safe where they were if they could get into shelter for the worst of the ash fall and protect their eyes and airways. Even a pair of goggles and a simple N -95 filter mask would work if they had to be outdoors for any reason. Bret guessed that the FEMA shelters weren't releasing people once they checked in. Kind of like a "Roach Motel" - They checked in, but they couldn't check out!

If that were the case, they needed to grab the rest of the stuff to build the shelter and rooms while they had the chance. Bret had a twinge of conscience, thinking "You're a looter" then he realized that instead of stealing TV's and jewelry, they were taking stuff they needed to survive from business that he doubted the owners were still alive. If it later proved that they survived, he'd pay them back if he could. The radio ended his musings when Leroy called to say that he was turning onto their road. Bret acknowledged the call, then concentrated on his driving. "Bret, you better pay attention - you're hauling enough explosives to blow you into orbit."

Bret was amazed that they had made it so far without any mishaps. The only driver who had any experience driving tractor/trailer combos was Brad. Kelly had driven a haul pack, which was better than no experience, but the biggest truck his wife had driven until now was the Dodge. He checked his speedometer, and realized that they were only doing 20mph. Bret knew that if they kept the speed down, it would be easier to drive the massively heavy rigs, and it would minimize shifting. Finally it was his turn to drive up the fire road. When he got home, he was glad to see Leroy was out directing traffic, and guided Bret to an isolated spot away from everyone else. Once they shut down, Maggie jumped out of her cab, met Bret halfway, and fell into his arms, relieved to see her husband again. From the passion of her kisses, Bret knew he was in for a long night.

They spent the next morning getting everything off-loaded and learning how to run the equipment. Between Brad and Kelly, they were able to figure the controls out, and they taught everyone else except Gloria and Veronica, who were relegated to safer duties. Between Brad, Bret and Leroy, they were able to figure out how to properly use the explosives. The mine's powder monkey's notebook helped immensely, especially the recipe for ANFO, and how to rig a shot that would bust up the dirt and rock without throwing it all over the place, or damage Bret's house. The recommended method was to drill a 2" hole 6 feet deep, add 4 feet of ANFO, and use a 1/4 stick of dynamite as an initiator charge, backfill and tamp real well, otherwise the shot would go straight up like a shotgun. If they bored them 6 feet apart, and linked the shots with det cord, the resulting explosion should lift the rock and soil, breaking it up so the loaders and bulldozers could work easier. Bret checked his supply of building materials, and realized they would come up short for enough 2x4's and sheet rock to build enough rooms so each

family would have private bedrooms. Luckily, they were used to communal living from the time everyone spent in Bret's house until they located their own houses. He'd have to locate a lumberyard to grab enough materials to build 8 bedrooms. That would give him 2 spares if Zack and Ron wanted to share a bedroom. He'd also have to locate enough brick to build another masonry stove/cooktop, and build chimneys for the new buildings. Bret added them to his "to do" list, but the first thing they needed to do was start excavating the spot for the Quonset huts..

Brad drove the D-9 bulldozer to the top of the hill, and started pushing dirt down the hill, and Kelly started the wheeled loader, and started picking it up and dumping it in the dump truck. Bret was driving the dump truck, and between the 3 of them, they made good progress cutting a big enough pad on top of the hill to safely blast the next day. The next morning, they used the Bobcat with the 2" auger to bore 6-foot holes 6 feet apart at the recommended distance from the edge of the slope. Once the holes were bored, they made a slurry of AN and diesel fuel and poured it into the holes. Bear made up the primary 1/4-stick initiator charge and inserted the electrical detonator, Bret cut the det cord to length to connect all the charges while Brad laced the det cord through the charges and connected them in a daisy chain, then stuck another detonator in the last dynamite charge and connected the wires to the detonators. Bret unrolled enough blasting wire to be safely away from the explosions, then took a whistle, blew it three times then connected the wires to the twist detonator, blew his whistle 3 more times, and yelled "Fire in the Hole" then twisted the handle. Less than a second later, he saw a dozen explosions in a line, and when the dust had settled, the dirt and rocks were at the bottom of the hill. Bret and Brad were grinning like idiots - this was much easier and quicker than bulldozing the stuff over the side. They spent the rest of the day using the bulldozer and loaders to clear the dirt away and pile it off to the side so they could fill it back in when the erected the Quonset huts. Once they were finished, Brad started drilling more holes further back, and Bret made up more charges. Now that they knew what they were doing, the second drilling and blasting sequence went much quicker. Right before dinner, Bret fired the charges, then they went home for dinner.

They were back at it by first light, and quickly cleared the debris. Bret and Brad drilled and set a 3rd set of charges, which would take care of the rest of the top of the hill. This time, he unrolled more blasting wire because there was no safe place to stand on top of the hill. When the charges blew, the hill looked funny, with the dirt over Bret's house almost 20 feet higher than the surrounding dirt. This time Brad drove the bulldozer up the hill and pushed all the loose dirt off the hill to build another flat spot to drill and blast. By the time Brad cleared the debris, they were almost halfway down the hill. Leroy and Jim were taking turns operating the dump truck and loaders, so Kelly could rest. She still wanted to run the loader, but Bret limited her to half a day. Neither Veronica nor Gloria showed any interest in operating heavy equipment, so Maggie and Nancy kept them busy doing other stuff. They both learned to make clothes, sew, and other skills they'd need now that "modern conveniences" meant having a wood fired stove to cook on, and running water instead of hauling your own wood and water.

Maggie taught them medicine while they were sewing to keep their minds off being uncomfortable. When Kelly came in the afternoon, she was exhausted, and would take a long nap. Finally Maggie talked to Bret who reluctantly took her off Heavy Equipment because Maggie was worried she was working too hard, and could compromise her pregnancy since she just entered her 3rd trimester. She joined the "Sewing Circle" as she derisively called it - Kelly was a tomboy growing up, and would rather fish and hunt, or "Kill it and Grill it" then sew or any other "girly stuff". Still she needed to learn, but she didn't show the enthusiasm the other women did for it. She guessed they showed the same enthusiasm for guns that she showed for sewing. She liked the medical training, and showed a good head for it, so Maggie let her read her medical books.

Once she got the basics down, Kelly confessed she'd rather study the medical books than sew. Maggie could tell that Kelly had about as much enthusiasm for sewing as she did for rock crawling, and told her she could spend as much time as she liked studying her books and working on the Internet while they had it instead of sewing. Kelly didn't make a habit of hugging other women but made an exception in Maggie's case! She dropped her sewing like a snake, and started in on the Merck Manual. Without Kelly, the dirt work went much slower until Bret remembered that Allen was available. Kelly was allowed back onto the heavy equipment just long enough to train Allen on the loader, dozer and dump truck. Allen was a good student, and by the end of the day was almost as good as Kelly on the equipment. The next day Allen's presence was definitely felt when Leroy, who was operating the dump truck had to hustle to keep up with him on the loader. Allen was loading the truck by himself almost as fast as when they had both loaders operating. Eventually, Bret let Allen operate the bobcat, and he was running the skid-steering like a natural, and whether he was drilling, loading, or using the backhoe, he was one of the quickest operators on the Bobcat. Bret knew that if things ever got back to normal, Allen would make a very good living as a heavy equipment operator because he had excellent eye-hand and foot coordination.

Two weeks later, they were down to the same level as Bret's house. While Brad drove the fuel hauler back to the mine to refill it, they started preparing the foundations for the Quonset huts. They didn't have much equipment, so they had to use a 2x4 and a home built screed to work the concrete, which took longer, and looked like heck, but they weren't worried about looks, only that they'd done it well enough to hold the Quonset huts in place until the shotcrete cured, then they could bury the building. Once the concrete was set enough to start working on the Quonset huts, they started lifting and bolting pieces into place using the cranes on the trucks. Once they had the pieces bolted in, Bret and Allen would scamper up ladders and connect the sections together. It took longer to assemble than it did to take it down, and a week later, the buildings were up and secured. Next they laid a mesh of concrete reinforcing wire on top of both buildings and tensioned it as best as they could. Finally they started mixing and pouring shotcrete from the shotcrete truck using it's built-in boom.

While the shotcrete was curing, they took their trucks into town and took all the building

supplies they would need to build 8 bedrooms, with some extra. Brad located a tire store that carried the size tires he needed, and had all the equipment and safety equipment to safely remove and install the tires. He took the Kenworth and a spare generator over there, and swapped out both front tires, and put the spare back on the spare hanger, then did the other truck the next day since they had tires to spare, and he wasn't busy scavenging. Brad asked Bret if any of their trucks needed new tires while they were at it, since they had a good selection of BFG off-road tires in stock. Over the next couple of days, all their vehicles got new tires, and they saved the old ones for spares. Finally the shotcrete was at full strength, and they spent the next week carefully backfilling the dirt around the buildings. The Quonset design was an arch, which would make it very strong. Adding 6 inches of shotcrete and reinforcing wire made it even stronger.

Once the buildings were set and backfilled, they carefully pushed the steam engine that Brad had coupled to the 20KW military generator head all the way back into the back of the building, and mated it to fittings they had installed for water and steam circulation and a vent pipe that went through the roof of the Quonset hut, through the dirt, and 6 feet above the top of the hill to vent smoke and excess steam. Bret wasn't too worried about it getting buried with snow, since he estimated the heat out of the stack would be between 80-100 degrees by then, and would easily melt any snow on top. Before the steam exited the building, there was a huge 500-gallon open stock tank full of water and a water/water heat exchanger to convert the steam back to water. The tank was circulated through heat exchangers in the water heaters in both houses, and another delivery tube warmed the Tilapia water with another heat exchanger. There was a thermostat on the Tilapia heater, and cold-water blend valves on both water heaters. Bret hoped he could stop using the masonry heater for heating water, and the waste material burner for heating the Tilapia tanks. They used the backhoe and loader to dig another septic system for the new shelter, and started building the bedrooms when they had time.

Bret's next scavenging trip was to buy all the bricks and materials needed to build a huge masonry heater stove and cooktop. The bricks that were lining the firebox had to be special refractory bricks due to the intense heat the Masonry heater stove was designed for, but the outer bricks could be anything he wanted. The system worked by storing the heat from the firebox in the mass of bricks or stones surrounding the firebox, and releasing the heat over time to keep the house warm. At the higher temperatures used, creosote buildup wasn't a problem, and the wood was almost 100% combusted. Bret had already installed a steel chimney pipe through the roof of the Quonset hut and out to the surface through the deep layer of dirt and rock, so all he had to do was mate the chimney for the stove to the existing chimney pipe. One of the building supply places had a brick yard out back, and he recognized a huge pile of refractory brick, and took it all, along with some conventional bricks that he could thread ½ inch rebar through to reinforce it to make it earthquake resistant. He took twice as much brick as he thought he needed, all the mortar mix they had, and all the ½" rebar they had in stock, along with all the tools they needed, and anything else that they needed that could fit on the trucks.

None of them were Masons, but luckily Bret had copied step by step directions and the plans for his existing Masonry Heating Stove/cooktop and saved them to disk. They made a couple of mistakes, but nothing catastrophic, and slowly assembled the masonry heating stove while everyone else worked on building the rooms and stocking everything. Once they were finished building rooms, Allen suggested that they take the extra 1" OSB sheets and construct an enclosed walkway between the two houses in case that proverbial 9-foot Indian needed to stand on another Indian's shoulders to have the snow up to his butt. Once they finished that project, Bret decided they needed to stock as much wood as possible into the middle building with the steam engine. Bret thanked God he had sited the propane tanks were they were, and running a line to the steam engine and the new building was relatively easy.

Allen realized why his dad selected a building 10 times bigger than they needed when Bret suggested filling the building with cut and split wood. The steam engine and everything else only used the last 30 feet of the building, leaving over 40 thousand cubic feet of storage space inside for wood. Allen told his dad they could have used a building a quarter that size, and Bret explained that the two 120-foot buildings made the construction much simpler, and meant both buildings could share the load equally of the dirt piled on top of them. Allen kind of understood, but didn't bother his dad by making him explain it.

Once they were finished with the heavy equipment, the men took several days driving them back to the mine property. Bret kept a couple cases of dynamite, the rest of the det cord, blasting wire, detonator caps, and two twist detonators and towed the rest back in the Connex box. They decided to keep the diesel fuel just in case, and located a couple more trailer tankers, and filled them full of diesel using the fuel truck. Bret wanted to return the fuel truck, but Brad pointed out that if the owners showed up, they could return it, but they needed it for now to scavenge fuel, since the dual-tanker truck couldn't siphon fuel, and this tanker truck had a pony pump that could. Brad suggested they return the dual-tanker trailer to the gas station when they emptied it, and keep the tractor in case they needed it. That mollified Bret's conscience, who thought their front yard was beginning to resemble a used heavy equipment lot. By the time they had returned everything they weren't going to need immediately, they were down to 1 tractor-trailer combo from Ralph's, 1 tractor unit, a fuel hauler, the bobcat, a backhoe loader and the deuce-and-a half from the Caltrans lot, and the stuff Brad had made. They still had more than enough to tackle any job around the compound.

With the coming of Spring, Kelly gave birth first to a beautiful girl named Annie, then Gloria gave birth to a boy they named Nicholas, but Jim told everyone to call him Nick. Finally after several false alarms, Veronica gave birth to a healthy boy they named Richard. Allen told everyone to call him Rick instead. The mothers and babies were doing fine. The animals were all doing well, and the stallion had a couple of mares pregnant. Maggie was looking forward to raising a couple of colts, and expanding their herd of horses. The chickens were laying eggs like crazy, and they set aside 20% of them to raise more chicks. Brad, Allen and Jim all got their gardens in as soon as possible, and were bone tired at the end of the day. Bret called Jerry

and asked him if he had a boar that he could mate to one of his sows, especially an unrelated boar. Jerry said he'd better hurry up, he was just about to slaughter him. Bret asked if it were better to bring the sow to the boar or vice versa. Jerry told him boars were temperamental, and the sow would be much easier to handle. Jerry suggested bringing 2 sows just to be on the safe side. That afternoon, Bret loaded 2 sows aboard the trailer for a visit to Jerry's farm. 2 days later, Jerry called back and said that the sows were probably pregnant, because Wilbur had a big grin on his face, and wasn't mounting them anymore. Bret drove over to pick them up, shook Jerry's hand, and drove home.

Chapter 18

The next morning, Bret was listening to his favorite talk radio show when the NOAA Emergency Weather notification kicked in.

"USGS has just updated the Level I Volcano Alert to a Level II Volcano Alert for the Following Areas: Mammoth Mountain and Long Valley Caldera, Northern California. The caldera has recently started forming a bulge that is expected to form a cone and erupt in the near future. With an estimated discharge of 750 Cubic Kilometers of ash, the USGS has ordered mandatory evacuation of a 50 mile radius, and highly recommends evacuation of a 200-mile region from North-northeast to South-southeast of the caldera due to prevailing easterly winds at altitude which could carry enough ash to bury everything from 30-50 feet deep up to several hundred miles east of the Caldera. People to the North, South and West of the caldera within a 100 mile radius could experience ashfall of up to 10 feet deep outside the 50-mile evacuation zone. If prevailing winds shift, then areas that would ordinarily not be in danger might be. Local and State Authorities are authorized to use any means necessary to preserve life and property. This message will repeat."

Bret yelled for everyone to get in the living room, then he called Brad, Allen, and Jim, and asked them to turn on their AM radios, or get over to his place ASAP. They all decided to come over anyway, and 15 minutes later they were all gathered in the living room. The message repeated again, and when it finished, Bret turned the radio off to let it sink in. After 10-15 minutes of silence, Bret faced the group and said "Unfortunately, this was what I expected to happen. It's happening sooner than I expected, but we're in pretty good shape. My best guess is we have anywhere from a week to a month before the Long Caldera erupts. We need to prioritize activities that make the buildings more habitable over the long haul, and accelerate our scavenging plans. If we get over a couple of feet of ash in Glendale, I can guarantee that any commercial building with a flat roof will have a collapsed roof, and the stuff inside will be destroyed. Second of all, we need to put a roof over the fuel storage area in case we get a lot of ash or snowfall. We have to move everything we can use out of your houses and into storage, either in our house, or the new one. I'm not sure any house besides the two we've built will survive a foot or more of wet ash. Maggie, we're going to need as many people as possible working, that means the new moms will have to work something out between the three of them so 2 of them are available for scavenging or relocating stuff, so you'll have to babysit each other's newborns. Any Questions?"

"Dad, if we get a 120x60 building for the fuel storage, we can use the extra space to house the livestock. I don't know how long the horses can last with what feed we have, but they won't last a month out in their fields once the ash starts falling. The Chickens and Pigs should be fine in a small enclosure for as long as we have to, but the horses will probably get restless from being cooped up so long."

Maggie spoke up. "I 've been thinking about this since the last time this happened. What if we stuck a burlap sack over their nose and mouth like a feed bag? That should at least protect their airway."

"Sure, but they can't drink or eat with them over their heads. Besides, it does nothing to protect their eyes."

"Horses have huge eyelashes, that should give them some protection once the ashfall has slowed down."

"Ok, but we're still going to need a year's worth of oats and hay for the horses."

"Well, let's add that to our scavenging list - check all the abandoned farms and ranches, take all their hay and oats, even if it's spoiled - the pigs can eat spoiled feed just fine."

With that settled, they got into groups and quickly organized what they had to do. Bret had impressed the urgency of getting everything done as quickly as possible. The only people who would be getting anywhere near their normal sleep for the immediate future would be the new moms. Bret told everyone else "We can sleep once the ash starts falling."

They all sat at the tables and started making lists of stuff they needed. Bret got out the yellow pages, and checked to see if there were any stores they had missed in their previous scavenging runs, and found a few in Altadena and some further north in La Crescenta. They would also try to clean out the hardware and lumberyards of any building supplies they might need to fix or rebuild the other houses once the ash stopped falling. Kelly took Bret aside and told him there should be a couple of Quonset huts on the property that they were in the process of dismantling and moving. Bret decided that Brad, Kelly, Leroy and him should go back to the mine and take anything they needed. Brad guessed Bret wanted Leroy along to ride shotgun, and suggested that he mount the M -60 again to Babe. Bret told Brad they should take his Dodge Ramcharger with a flatbed trailer to load the Quonset hut components on. Brad said he' d see them first thing the next morning. Meanwhile Maggie was organizing getting all the supplies, furniture, and people inside the buildings as quickly as possible. They decided the fastest way was to do 1 house at a time, starting with Brad's since he had the Tilapia and worm farms that they desperately needed for the group to survive. If they relocated it to the steam engine room, they'd stay warmer, which was a good thing for the fish and plants. Bret suggested relocating their AE setups as well if they had time, especially the battery banks to store the power generated by the steam powered generator, and inverters to power stuff.

The next day, under grey cloudy skies, Bret and his team drove to the mine and spent the rest of the day finishing disassembling the 60x120 foot Quonset that Kelly pointed out to him. Maggie took everyone else over to Brad's house, where they packed and moved everything to the new house over the period of several days. The next day, Kelly joined them to organize

packing their personal affects. While the moving teams were busy moving everything, Bret got as many of the men as he could spare to help erect the Quonset hut. First they set footings for the hut, since they didn't have the time or materials for a poured slab concrete floor and footings. Once the footings were set and the bolts emplaced, they started erecting the Quonset hut. With the tools and cranes they had, and the practice of assembling 2 already, the third unit went up in record time. They only got to sleep an average of 4 hours per night, except Sunday, which Bret declared would be a day of rest. Brad started leading impromptu services in Bret's living room Sunday morning, and soon everyone was showing up and participating in his Bible Study/Worship Service. Gloria turned out to be a good guitarist, and had a good voice to match. She had a bunch of lead sheets in her guitar bag for popular modern Christian songs, which totally amazed Jim.

"Just because I was a total Sheeple didn't mean I wasn't a devout Christian. I'd played in our Church's pop band for the 10 years before I met you."

"Why'd you stop?"

"When I moved in with you, we were living in sin, and I didn't feel right about Worshiping God on Sunday, and fornicating with you the rest of the week."

"Why didn't you just tell me we had to get married first - I would have married you in a heartbeat!"

"Never thought about it."

"Anyway, we're married now, so let's praise God."

Gloria gave her husband a big hug then started crying. Not knowing what she was crying for, Jim just held her. Finally she stopped crying and dried her eyes.

"What was that all about?"

"For the first time in years, I've felt close to God."

"Me too, let's go rejoin the rest of the group."

The next day, they started moving all the fuel tanks and the tankers into the back of the Quonset hut, leaving a 60x90 foot space up front for the animals. Bret told them to leave a lane available so they could get the fuel trucks in and out if they needed to. Before they put the shotcrete on the building, and covered it with the remaining dirt from their previous projects, they cut 2 holes in the roof for ventilation pipes. One of them had a turbine ventilator fan, and the other was just a straight ventilator pipe with a high-wind hat on top. Both of them were 10

feet above the top of the hut, and secured with guy wires. Finally they poured the rest of their shotcrete over the building with reinforcing wire mesh to a depth of over 6 inches. Once the shotcrete cured, they backfilled over the building with all the dirt they had. They managed to get a foot or two on top, and 6 feet on the sides. Meanwhile Maggie called Jerry and asked him if he knew of anyone with enough feed to feed their horses for the winter, or two. Jerry laughed and said that there was a huge horse ranch right next to Larry's place, and he was sure it was deserted, because Larry never mentioned seeing him. Right before he put the phone down, Jerry told her that his wife died the other day, and he wasn't feeling too hot. Suddenly, she heard a gasp of breath, and a moment later, the phone hit the floor. She repeated his name several times, but got no response. Fearing the worst, she yelled for Bret, who told her that Jerry was dying from Hodgkin's Lymphoma, and would probably prefer to die quickly this way. "Jerry made me promise to bury him and Margaret, so I'll go and do it."

"Hold on there a second Bret Wilson, Jerry was like a father to me - I want to be there."

"Ok, but handling dead people can be smelly and gross."

"I raised 2 boys, I think I can handle Smelly and Gross."

"Glad we didn't eat breakfast yet."

They drove over to Jerry's place, and found Jerry slumped on the floor. Maggie checked his pulse, and he was dead. Margaret's body was in her bed, and had started to decompose, and had soiled the sheets. Bret suggested using the sheets to support her body, and sling her into the simple casket Jerry had prepared for her. Bret carried the pine casket up the stairs to her bedroom, while Maggie cleaned up her body as best as possible without gagging. They undid the corners of the sheets, and using it like a sling, picked up Margaret's body and slid it into the casket. They muscled the casket out the door and to the edge of the stairs. Bret said "Stand back, I've an idea." He tied a rope around the casket, and pushed it over the edge of the stairway. Once the balance point was passed, the casket slid down the stairs like a toboggan, and stopped near the front door.

"Bret Wilson, don't you ever do that to me!"

"Maggie, she's gone, this is just the shell. I'd rather not get a hernia picking them up." Bret went outside, got the backhoe loader started, dug 2 graves next to each other near a nice shady tree, then tied the rope to the casket, and picked the rope up with the loader, and carried it to the first grave, then gently lowered her into her grave. While he did that, Maggie did what she could for Jerry's body. They rolled him into a blanket, and picked the body up and put it in the other casket. They got the casket out the door with some strain and sweat, but finally got it close enough to use the loader, and Bret hooked another rope to Jerry's casket and carried it

with the loader bucket to the gravesite. Once both bodies were in place, Maggie stood there, then kneeled down to pray for them. Finally she recited the 23rd Psalm, then told Bret "You're right, they're not there anymore. Let's get them buried and get back home."

Bret made short work of burying the caskets with the loader, and checked out the house and barn. There was tons of stuff they could use, but decided to come back tomorrow since Maggie was obviously upset, and might think looting their place before their bodies were in the ground 24 hours to be in very poor taste.

They drove home in silence, lost in their thoughts.

When they got home, Bret handed Maggie a letter he found on the Kitchen table at Jerry's house addressed to her. She went into their bedroom and sat down on the bed to read it.

Dearest Maggie:

If you're reading this, Martha and I are dead. Bret promised to bury us, but don't be mad at Bret or yourself if you can't. Don't worry about us, we're both in heaven. I wanted you to know you were like a daughter to me, and I'm really proud of you and Bret. As far as the house and everything goes, use whatever you can to help you survive. From what Bret's told me, you're pretty well fixed. I know part of that is because of you. Anyway, here's a list of some spots you might check, and things you might need. Feel free to help yourselves.

Love Always,

Jerry

Maggie broke down and cried for the first time. This was worse than losing her father, who didn't pay that much attention to her, and would rather golf than spend time with his only daughter. Jerry became a replacement father for her after her dad died, and did everything with Jerry's family on weekends and summers. She remembered going hiking, fishing, camping and hunting with Jerry and his family. Funny thing was she never spoke to either of Jerry's kids after she married Bret. She remembered the first day she met him, then the time he proposed to her, and the look on Jerry's face when she told him, and asked if he'd walk her down the aisle. Bret knocked on the door, breaking the spell.

"Come in Bret."

Bret walked over to Maggie and gave her a big hug. "Sorry I handled the bodies like I did. I missed them too." Maggie reached over to give Bret a big hug, and he held her while she cried some more. When she dried her tears, she told Bret that Jerry had told her to take anything they needed from his house. Bret nodded, too choked up to speak. Finally he regained his voice.

"Maggie, we need to get as much horse feed as possible, and we need to check Jerry's place. If I know him, he was even better prepared than Larry. I wanted to send Bear and Nancy and the 4 kids to Larry's neighbor's place to get all the hay and feed they have, and anything else we can use, while we go through Jerry's stuff. Would you be OK with that?"

"Jerry said we could have the stuff - so I'm OK. I think Allen and Veronica should stay with us, I'm pretty sure the other rancher won't have much stuff we need besides the hay and horse feed, unless he had a huge fuel tank and some other stuff we can use. Either way, they'll be out of radio range, so they can't talk to us until they crest the hill."

Bret and Maggie got to Jerry's place first, and went through the house, room by room, packing stuff they could use, including food, spices, kitchen stuff, towels, sheets, soaps, detergents, and other small stuff. They would have to come back later with a bigger trailer or the tractor-trailer combo if they wanted the appliances or any big furniture. Bret found Jerry's gun collection and ammo stockpile, and put everything in the truck. They made a list of the big stuff they wanted, and decided to come back later with help and a much bigger trailer They took all the tools and stuff out of his garage and barns, then loaded the backhoe loader onto the trailer and drove back to their house. An hour later, Bear showed up with a huge trailer piled high with hay, and the bed of his truck stuffed with bagged feed. He told them they had a huge diesel tank full of fuel, and some farm equipment that they might want, but he didn't have any way of towing them home since all the ranch's vehicles were missing. Bear told Bret that they were probably out somewhere when the quakes hit. Bear backed the trailer into the Quonset hut that they were storing the fuel tanks in, and dropped the legs, then unhitched and drove out.

Bret talked with everyone, and they agreed to strip Jerry's house of anything useful including furniture, etc. so they wouldn't have to strip their houses to make the "shelter" habitable. The next day, they took the tractor-trailer combo and both trucks hauling their biggest trailers, and loaded them full of stuff. They took the furniture, furnishings, fixtures, appliances, cast iron stoves, sinks, counters, cabinets, and basically stripped Jerry's house to the bare walls. It took several trips, but they felt is was worth it to avoid doing the same to their houses. The new shelter had a huge common room with a huge masonry heating stove/cooktop for cooking, eating, and recreation. The bedrooms were set off to the sides, and set deep into the hill where it was more temperate. The common walls were well insulated for privacy, and each bedroom was really a master suite with it's own bathroom.

The furnishings from Jerry's house were enough to fill the common room, and provide the bare essentials for the bedrooms. Bear reminded Bret there was a bunch of useful stuff at the ranch next to Larry's, and if they could all drive over there, they could get it all in 1 trip. Bret checked, and the diesel tanks could stand some fuel, and the tanker was almost empty. Brad volunteered to drive it to the mine while they were there and fill it up with diesel. They took off right after breakfast, and made great time. Brad continued on to the mine by himself while everyone else stripped the ranch of anything useful. Bret spotted a pipe horse corral, and they

descended on it with their air ratchets, and quickly had it disassembled and stowed aboard a flat bed trailer. Bret spotted 2 500 gallon storage tanks, and found out they had diesel in them, so he emptied the tanks into any convenient containers, including filling all the tanks on the trucks, then set the tanks up to be towed back to their house. While Bret, Bear, Jim, and Allen scavenged his lot, barns and sheds for useful stuff, the womenfolk packed everything in the house they could use up for the men to carry out to the trucks. Bret was glad he remembered to bring the dollies with him, or their backs would be killing them. Later that afternoon, Brad showed up with a full fuel tanker and some news. He was listening to the radio to pass the time, and the USGS had upgraded several volcano alerts in Northern California, Oregon and Washington State from Level I to Level II due to increasing activity. He said some of the volcanoes included Lassen, Rainier, Shasta, and Mt. Hood. Bret realized they were already doing everything they could, so he didn't tell everyone else about what Brad told him. That evening, they got home and took the next day unloading everything and moving it into the shelter.

Bret checked his prioritized list, and realized they needed another scavenging run into town, and got everyone together the next morning, and handed out assignments. They'd stay in touch using their radios, and they split up into 3 groups. Gloria was assigned to stay home with the babies, since she was breast feeding and producing the most milk. Brad fired up the tractor-trailer, and Bear and Bret drove their Dodge Ramchargers, while everyone else followed in their vehicles. They cleaned out all the grocery stores they could find of usable products. Bret's team cleaned out any hardware and building materials stores of anything they could use. Bear's team hit any miscellaneous stores that they missed the first time. By the time they met at home later that afternoon, Bret hoped they had everything. He checked their supplies. The diesel tanks were full, the tanker was full, giving them over 10,000 gallons of treated diesel. Brad, Jim, and Allen's tanks were full of treated gasoline, giving them around 1500 gallons of gas. Between the tanks and the full propane tanker, they had over 16,000 gallons of propane. Looking at all the empty space, he realized they needed A LOT of wood, and made that Priority #1.

Meanwhile, Maggie and a couple of helpers were inventorying the food and supplies. The news was good but could be better. They were short in several critical areas, but there wasn't much they could do about it. They had about 10 years worth of food for their group, and about 5 years of supplies. They'd either have to enact draconian conservation methods, or else learn to make their own. Maggie and Nancy were both in their mid-forties, so hopefully they would go through menopause soon and that would stretch their sanitary supplies. Maggie hoped the women would all have large families because they had plenty of diapers and cleaning products, and they didn't need feminine sanitary supplies for 9 months, which would further stretch the limited supply. Maggie vowed next time that the women would do the scavenging and leave the men at home. Later that afternoon, when they compared notes, Maggie was pleasantly surprised to find out that they had more paper products than she thought. The women had

moved larger quantities to their houses than she realized, so they were set. She gave Bret the good news at dinner.

After dinner, Bret gave everyone the good news that they were turning into lumberjacks again, and asked them if they knew of any large stands of trees they could quickly and easily fell. He wanted to cut them down and limb them on the spot, then load them on a trailer as 30-foot or shorter logs then cut them to length, split and stack them in the room with the steam engine. Bret gave them the good news that they had 5400 square feet of storage space available, and the roof was 20 feet high. When they imagined how many cords of wood it would take to fill that room, the groaning and complaining started.

"Look people, we need enough wood to keep us in power for 5 years, plus what we use for cooking and heating the buildings. I don't like it any more than you do, but at least we have 4 chainsaws, and a bunch of axes and hatchets to limb the trees, and a backhoe to lift and haul the wood onto the trailers, and a hydraulic splitter to split the wood. Imagine what this job would be like if we had to do it by hand. You should be grateful we have modern tools and the fuel to use them."

After Bret's dressing down, the grumbling went down considerably, but didn't go away. Nancy mentioned she saw a large stand of trees near Jerry's place that was close, and looked to be a couple of acres of lodgepole pine. Bret thought that would be a good place to start, because lodgepole only grew branches at the top, and they could easily get 30-foot logs out of a mature lodgepole. The next morning, they loaded up their tools and equipment, and drove over to the plot of lodgepole pines. First they cleared all the debris and chaparral from around the trees, then later that afternoon, they started felling trees. They ran out of room and daylight at the same time, so they left everything there and drove home. The next day they were either chopping or felling trees. Kelly got to run the backhoe, and Allen drove the Bobcat to handle the smaller stuff. With all the equipment, they got a lot done that afternoon, and drove a loaded trailer full of 30-foot logs back to the shelter. Unloading was easy but dangerous, and they went back the next day for another load. It took them almost a week to fell and de-limb all the trees in the 5-acre stand of trees. The next day Bret decided they needed to cut and split the logs and stack them in the building. They developed a system using the backhoe to set a log onto a set of saw horses and push it forward as they cut it into 14" lengths to fit inside the masonry stove's firebox. The men took turns feeding the splitter and piling wood onto the trailers pulled by the bobcat and the Harley-powered mini-truck Brad built. With everyone pitching in, it took several days of hard work to saw, split and stack the wood they had cut. Even with all that work, they had filled the building less than 1/3 full. Bret said "Back to work" and everyone groaned.

Maggie said there was another smaller stand on the far side of the horse's pasture. They went and checked it, and they located another 5 or so acres of lodgepole pines. The horses were moved into their shelter, and the spent the next week clearing, felling and de-limbing the trees.

Once the work area was clean, they released the horses, and went back to splitting, cutting and stacking the wood. When they finished this time, the good news was they had a 8-foot high stack of wood that filled 2/3 of the available space in the room. Bret wasn't in the mood for more wood cutting, so he gave them a reprieve.

Chapter 19

The next day, Bret was curious about how many cords of wood he had stored, so he logged onto the internet, checked his online converter http://www.onlineconversion.com/ and discovered that 1 cord of wood equaled about 128 cubic feet. They had 5400 square feet of storage available, and they had filled it about 2/3 full, and about 8 feet high, and higher in spots where Allen had started throwing chunks of wood on top of the pile to see how high he could get it. He used his calculator to figure out that they had about 32,000 cubic feet of wood stored, and that meant about 250 cords of wood. They barely used a half-cord last year in their masonry heater, and that was a cold winter. Between over 16 thousand gallons of propane, and 250 cords of wood, they had to have enough fuel to make it. According to Maggie, they had enough food and supplies stored to last almost 10 years, not including what they could raise in their aquiculture system, or raise in chickens, eggs, and pork. With Brad's aquiculture system and worm farm setup next to the steam engine, the fish were thriving, and the plants were growing faster due to the warm humid environment. Even the worms were growing faster. Bret was tempted to relocate his system next to Brad's, then remembered a wise old saying about not leaving all their eggs in 1 basket, and decided to leave his where it was.

While he was on the internet, he had a brilliant idea. He checked, and they had scored a case of blank CD-ROM and DVD disks from the Radio Shack, and several desktops and laptops with a CD/DVD high-speed burner. If they could connect them to the internet, Jeremy and Natalie, who where the most internet savvy of the group, could search the Internet for sites to copy stuff they might need later. Bret had a huge library, but he knew there was more stuff out there. When he asked them, they agreed in a heartbeat, and they quickly connected 2 more laptops to Bret's system using the built-in Network Interface Cards and some Ethernet cable that they picked up at Radio Shack. They now had 3 computers connected to the internet, and Bret made it Jeremy and Natalie's job to surf the internet for usable information like how to do stuff, and anything else they could come up with, and burn a copy to CD-ROM or DVD. He wanted them to use the DVD's first, because they held more data, and were more durable than the CD-ROM's. Two hours later, they showed Bret a preliminary list of what they could get, and Bret showed it to everyone else, who thought it was a great idea, and added suggestions to the list.

Bret had already purchased an entire library of stuff, and he was sure they might be duplicating efforts he already had, but realized they didn't feel very useful right now, because they weren't strong enough to haul wood all day. Besides, they might find something that he hadn't considered, like how to build a heliostat, or some esoteric medical knowledge.

Between the solar panels and wind turbines, they were able to keep up with the new load, and they ran the steam generator just enough to keep the batteries topped off, make enough hot water for the fish and their hot water heater. If the ash started falling, they'd first lose the photovoltaic panels, then they might lose the wind turbines to damage from the abrasive nature

of the volcanic ash. That brought Bret to a full stop. They had enough power without them, and it was stupid to risk damaging them for power they didn't need, so he added taking them down and storing them to the list. Bret wondered if there were any other items he should bring in to protect them from damage by ash. The last ashfall was just a matter of inches, but this time, they could get up to 10 feet! With that figure in mind, he looked around the yard, and checked the height of anything that was outside. The chicken and pig enclosures would be buried, but they would be inside. Bear's trailer needed to be moved into their garage, along with any other vehicles that could fit.

Bret made a unilateral decision that morning - everyone needed to move into the shelter starting that afternoon, and get everything under cover that was liable to be damaged by ash. He also decided that everyone would bring all their weapons and supplies over and store them, because if their houses collapsed under 10 feet of ash, they might never get to their weapons and supplies again. When he was finished, he called a meeting, and told them they needed to move into the shelters.

"Everyone, according to what Brad heard on the radio last week, and what I've seen on the Internet, the volcanism is escalating, and soon the USGS will be forced to issue a Level III alert, and we need to move everyone into the shelters starting this afternoon. Bear, you need to move your trailer into our garage, and rearrange things to get as many vehicles in the garage as possible. Also, we need to start moving the animals into the fuel storage building ASAP. Any Questions? Great, let's get started now!"

With that, the meeting broke up, and everyone started moving their stuff to the shelter in earnest. The rest of the day, people were driving up and down Bret's driveway with vehicles and trailers packed full of stuff. Once they had unloaded everything, they went back for more. Bret and Maggie went to get the horses, and move them to their corral inside the fuel storage building. When they finished, they started with the chickens and pigs. Finally when it got dark out, Maggie told everyone they were eating dinner at their place, she had a huge pot of stew on the stove. She didn't get any objections from anyone, and after dinner, they walked back to their new bedrooms in the shelter, and went straight to sleep. The next morning, Allen grabbed his dad "We forgot to extend the outside cover to the barn. What if we need to feed the animals while it's snowing or raining ash?" Bret's "Oh Shit!" look said it all. They quickly dropped everything they were doing to extend the enclosure to the man door entrance to the barn/fuel storage room. While they were there, Allen suggested they park all of the smaller vehicles in the barn, since they weren't going to be used for a while. Bret told him to make sure the Bobcat loader was fully fueled and parked right inside the door with the loader bucket on it. They'd need it to clean out the corral, and to move ash and snow. Allen told him they needed to make sure the roll-up doors were clear so he could get it out. They stopped the enclosure at the man door, and built an awning over the roll-up so they had a cleared area to get the door up.

When they finished, Maggie came out yelling "Everyone get under cover - it's started." 5 minutes later, everyone was gathered around the radio when they heard and felt a huge "BOOM" and the building vibrated like a Chinese Gong. Next came a rolling motion, then minutes later, it was silent. Bret pulled his Surefire Aviator flashlight out of his pocket, and checked on everyone. They were OK, but he was wondering why the power went out. Right as everyone got to their feet, another shock wave hit them, then several more.

Bret yelled "Everyone lay down on the floor, protect your head and curl up into a ball if you can. This building is stressed to take it, but we might be in for a bumpy ride." 2 minutes later, the shaking stopped, and Bret said "Everyone stay down, I don't think it's over yet." When there were no more shocks for 5 minutes, he checked Maggie and she was OK. She was wearing her fanny pack, and he asked her to check on everyone else. Bear was fine, so Bret asked him if he'd help him check on the power situation. When they made it downstairs, water had sloshed all over the place, and they put as many fish back in the water as they could. They dried their hands, then checked on the power rack. One of the bolts had torn loose, and a connector had popped loose. Bret made sure his hands and feet were dry, and reconnected the connection, and the power came back on. He pulled his radio out of his pocket, and asked Maggie if the power was on upstairs.

"Yes, the power's on, and except for some bumps and bruises, everyone's OK. The kitchen's a mess - everything on the counter is now on the floor."

"Ok, if that's all that's wrong, I'll take it and be glad. Could you and Nancy check out the pantry. We'll keep checking things out down here, so leave your radio on."

"Ok Dear."

Some stuff had been knocked off shelves, and some glassware was broken, but the pantry upstairs was in pretty good shape because Bret had insisted on several anti-earthquake features, like retainers across the shelves to keep everything on the shelves. Downstairs, everything was OK, but several shelves had been rearranged. Nothing was broken, so they could rearrange it later. He called Maggie and said they were going to check on the Animals. Maggie said she'd better go with him and check on the horses, who were liable to be scared out of their wits. They opened the man door carefully, and several horses had escaped the corral, and one mare was limping. The Stallion was laying on his side breathing hard, and his eyes had a glazed look. Maggie recognized the signs of shock from panic, and reached into the Veterinary Emergency Kit mounted on the wall, quickly prepared a syringe of tranquilizer and injected it into the Stallion's shoulder muscle. She was careful to approach from above where he couldn't see her, and she slipped the needle in and backed out before he knew she was there. I minute later, she could see that the tranquilizer was taking effect as his breathing slowed, and he visibly relaxed. Bret had rounded up the mare, and led her back to the corral, opened the gate, and led her back inside. He handed her a carrot and she ate it from his hand and followed him

to a quiet corner. Maggie went over to check the mare, who had a cut on her leg, but it had stopped bleeding already. She took a bandage out of her kit, put some antibiotic ointment on it, and covered the wound, then wrapped 2 turns of Coach Wrap over the bandage to hold it in place. Nancy and Bear said the chickens and pigs were OK as far as they could see, and there were no injuries or escapees. Bret called Allen on his radio, and he said everyone else at the house was OK. The mothers were in the nurseries checking on their infants, and Allen suspected nursing and cuddling them, partly to calm the infants, and partly to calm themselves. He told his dad Natalie and Jeremy were OK too, and Brad had Kelly's two sons with him playing a game. He heard an update on the radio, and the Long Valley Caldera had exploded violently, then Lassen, Shasta, Rainier, Hood, and even Mt. St. Helens were in the process of erupting. Bret knew that anyone within 25-50 miles of any of the volcanoes would probably die from either pyroclastic flow, lahars, flooding, lava bombs, or any one of a number of causes. He prayed that FEMA had gotten everyone out. They were over 100 miles from the nearest volcano, even where they were the shock waves and earth tremors could have leveled any unreinforced buildings, ripped open roads, and caused a bunch of problems all by itself. Bret checked the feed containers, and was glad the chicken and pig's feed containers were full of feed. He knew that the worms could supplement the chicken feed for the chickens, so they should be OK. He'd set up a set of lights in the chicken coops that would simulate the light levels and duration of late spring/summer to keep them laying as long as possible. Bret had left instructions earlier that 1 out of 20 eggs weren't to be disturbed, and were left to hatch. They already had a bunch of chicks that were growing quickly, and would soon be either laying eggs, or slaughtered once they reached optimum size.

By the time they had finished with the animals and checking the storage, Allen was on the radio telling Bret that the ash had started to fall. The good news was that the temperature wasn't rising. Bret hoped that Yellowstone wouldn't erupt, so they could come out of their shelters in a year or so and hopefully get a crop in before anything else happened. In their travels, they had increased their supply of non-hybrid seeds by 5 times, and had sufficient stock to plant huge gardens on each property that had water, even if the house wasn't standing anymore. Bret knew that Jeremy and Natalie's house would survive, since it was built almost as well as his. Hopefully the roofs wouldn't collapse at Brad and Allen's houses. Once it was safe to go outside, he'd get together work crews to clear off roofs as best as possible and pile the ash away from the houses. One item he was glad to find was a case of N -100 filters, and another case of USGI surplus gas masks with current NATO spec NBC filters. Unless things were really bad outside, the N -100's and goggles should be sufficient.

Bret walked back in the house and accidently walked in on Jeremy and Natalie making out. He was glad that they were still dressed, and backed out without disturbing them. He was surprised by what he saw, and realized it would only be a short while before they wanted to get married too. He thought about that, and decided to bring Maggie and Nancy into the discussion this time after dinner. He checked with everyone else, and they were busy cleaning up damage from the earthquakes, so he decided to check the Internet and radio for any new news. He

realized that the Internet would quickly stop working like it did last time when the ash in the air was too thick to permit microwave transmissions. He was reading the USGS site when the signal was interrupted, and the carrier light went out on his DSL router. He turned on the radio, and the signal strength was down, but still readable. He checked out the front door, and the ash wasn't coming down that hard, so he put on a dust mask and goggles, cleaned off the dish, and checked again. The DSL light came back on, and he logged onto the USGS site. They had a list of all the volcanoes that had erupted, and the estimated damage zones. Anything within 50 miles to the east of the Long Valley Caldera was destroyed by the blast wave. Snow on the Sierras melted instantly forming huge lahars. Bret couldn't get any data on the other volcanoes because the DSL connection chose that minute to go down again. He checked outside, and the ash was much heavier than last time, and he said "the heck with it" and went back inside to try the radio.

The USGS radio was just repeating the previous information, so he shut it off, and went to go start dinner. After dinner, he asked Bear, Nancy and Maggie to meet him in the office, they needed to discuss Jeremy and Natalie.

"Bret, what's this all about?"

"A little over a year ago, Bear and I had a discussion about the kids, and I wanted to include you two in the discussions, since I think that it will only be a matter of time before Jeremy and Natalie want to get married."

"What are you talking about - he's only 14!

"Natalie's 15."

"Maggie, I'm going to tell you something you can't discuss with Jeremy, you'll probably embarrass him to death. I walked in on them making out in the office when I came back. From the looks of things before I made myself scarce, it looked like they were barely able to keep their clothes on. They might be ready to have a physical relationship, and hopefully Jeremy will ask to get married first."

"Bret, they're still kids!"

"Maggie, they stopped being kids shortly after the balloon when up, and we asked them to take on adult responsibilities."

"Still, they're awfully young."

Bear jumped between the two of them and suggested "Why don't we bring them in here and ask them like we did with Allen and Veronica?"

Nancy looked at Bear, and he shrugged. What could he say - pleading the 5th would be the best right now. Bret looked at Maggie, who looked at Nancy and finally nodded her head. Bret ducked outside the door to bring them in the office.

"Jeremy, Natalie, we need to talk to you. Instead of telling you what to do, we're going to treat you like adults and ask you what you want to do."

"What's wrong Dad?"

"Nothing's wrong - I accidently walked in on you and Natalie this afternoon, and I think it's time we talked about some stuff."

"If you mean the Birds and the Bees, we already know that stuff."

"No, I mean about taking on Adult responsibilities, and making adult decisions."

"OK, go ahead."

"You and Natalie have been dating for quite a while, and managed to behave yourselves. I don't want to be blunt, but if you're planning on having sex, you need to consider the consequences, and decide on whether or not you want to spend the rest of your life with Natalie if you get her pregnant."

"Gee Dad, we really haven't been doing anything more than necking and stuff."

"From the looks of what I saw, it looked like the two of you were barely able to keep your clothes on."

"Sorry Mr. Wilson, that was my fault. I wanted to see how far I could push things. Right after you left, Jeremy asked me to stop."

"I'm glad to hear that Natalie. You two aren't much younger than Allen and Veronica when they got married, but my gut feeling is you should wait a few years to get married."

"Mr. Wilson, Jeremy and I already discussed this, and we've decided to wait a while. If things change, we might want to push things up, but for now everything's OK."

Natalie, you can call me Bret, Ok?"

"Sure Mr. Wilson...er...Bret."

Bret laughed his head off, and told them to let them know if they decided to get physical. With

that, they stood up and went to bed.

Chapter 20

** Later that Day, Washington DC The Situation Room **

"Tom, give it to me straight, how bad is it?"

"Mr. President, our preliminary estimates show extensive damage from the Long Valley Caldera eruption, and the eruption of Mounts Lassen, Shasta, Hood, St. Helens, and Rainier. The exact dollar amounts or casualties haven't even been estimated as of yet. What we do know is that the Military and FEMA managed to evacuate most of the civilians, except those who refused to go."

"Why in God's Name would anyone stay?"

"Who knows, maybe they didn't believe the warning, or like that one guy in Mt. St. Helen's that didn't want to leave his home even if it meant his death."

"OK, what are we facing long term?"

"I've got a report from the USGS, but it's only projections and estimates. What we do know is most of the Western United States is either being covered with ash, or has been destroyed by either pyroclastic flow, lahars, lava, and mudslides as the Sierra Nevada snowpack melted. Frankly Mr. President, the timing couldn't have been worse. Just last week the Sierras got another 10 feet of snow, and it's been the third consecutive year of record snows all up and down the Sierras. When the hot ash and gas hit the Sierra's, all the snow melted almost instantaneously, resulting in avalanches, mud and rock slides, flooding, and huge loss of life. We weren't expecting that to happen, so we didn't evacuate people in the Sierra towns, or Northwest Nevada."

"Nevada, what cities were hit?"

"Everything from Reno south along the 395 corridor including Bishop California."

"My God Tom, there's Millions of people along that road."

"We weren't expecting it, and I'm sorry we didn't see it coming. If you want, my resignation could be on your desk in an hour."

"Tom, I need you here - we're facing the worst natural disaster this Country has ever faced."

"Very well Mr. President."

"Condi, what can you add to this conversation?"

"Mr. President, we are re-tasking all available photo-reconnaissance birds, and we'll have imagery soon. If you wish, we can give you a live feed now from the KH-11 that's over the US, but it's not directly overhead of the West coast right now."

"Anything's better than nothing - please set it up."

Condoleezza Rice nodded to an aide, who dimmed the lights, and flipped a switch, sending the take from the KH-11 to the Situation Room and projecting it on the big screen in front of them.

"Mr. President, what you're seeing now is real-time imagery of the Western US from the viewpoint of 25,000 miles over the Mississippi. The gray haze is an increasingly deep layer of smoke and ash from the Volcanoes, and several forest fires started by them. Switching to Infrared, you can clearly see the Volcanoes are still erupting, spewing lava, ash, and deadly gasses into the atmosphere. My best guess is nothing 25-50 miles east of any of those volcanoes survived. The water is polluted, the soil will soon be covered with up to 50 feet of ash, and the plants and animals dependent on sunlight will soon die off, that is the ones that survived the initial blast, pyroclastic flow, flooding, etc."

"Is there any good news?"

"So far Yellowstone hasn't erupted yet - if it does, we'll lose everything West of the Appalachians."

"Why wasn't I told of this?"

Tom Ridge spoke up "Mr. President, we didn't know ourselves until the US Geological Survey Vulcanologists started issuing alerts. Most of the time the Level I and Level II alerts are ignored, but this time, they turned out to be accurate. Luckily my deputy in charge of FEMA took action as soon as the Alerts started coming in. They were already strapped by dealing with the earthquake damage in California, but they were able to get regular Army units rolling into the area for a mass evacuation."

"Where are the refugees now?"

"Montana, Colorado, the rest of the Midwest. It depends on how much time we had, and how far they had to go. We didn't want to relocate them any farther than we had to in case this was just another Alert."

"OK people, we got caught with our boxers down on this one, but I won't let it happen again. If Yellowstone shows any indications of getting ready to erupt, we need to relocate everyone

out of it's path and to safe zones."

"Mr. President, that would mean moving over 50 million people thousands of miles."

"Would you prefer they were dead?"

"No, Mr. President."

"Very well you have your orders. Form a working group to plan contingencies starting now, and get the ball rolling. The next time the USGS posts an Alert about Yellowstone, I expect to see every Green-painted truck we have rolling in response - is that understood!"

The entire room chorused "Yes Mr. President."

"Very Well, meeting adjourned!"

*** Earlier that morning in Roseburg, OR ***

"Jodi, get the kids and head to the shelter!"

"What's wrong Paul, I thought we were safe here, Mt, Hood's over 200 miles Northeast of here?"

"Just heard on the radio - the USGS issued a Level III Volcano Alert for the Three Sisters."

"Crap, that's just 100 miles away from here. What about Crater Lake?"

"No word yet, but we should start preparing for the worst."

"Good thing the kids are home from school today. I'll go round them up, and have them start bringing stuff into the shelter."

"Concentrate on food and water. Make sure they bring some games and books - scratch that - no Battery operated games, we don't have the batteries to spare on entertainment."

"How about rechargeables, we have to run the generator anyway to power the air filtration system."

"Ok but NO alkalines, I'm saving those for our emergency equipment. Get the kids moving, I'll park the vehicles under the pole barn - that has the best chance of not collapsing, and I'll take the Bug Out Bags and stuff out of the vehicles."

"Ok, dear see you in the shelter in an hour or so."

"Take the portable radio with you, and if they start broadcasting an Eruption Warning, call me on the FRS, and I'll drop what I'm doing and get inside. Remember, even at this range, the concussion from the blast can cause damage, and break windows, so stay away from windows. The flying glass could kill you."

"Ok, we'll start packing now."

*** Somewhere in Winnemucca, NV, later that morning ***

"Herbert, forget the cattle and get into the storm shelter."

"Martha, how many times have I told you, it's NOT a storm Shelter, It's a Fallout Shelter."

"I'll call it a Storm shelter if I want - all my relatives think you're nuts!"

"I hate to bring this up Martha, but all your relatives are in California - We haven't heard from them in weeks - they're probably dead! Who's "Nuts" now?"

"You're right Herbert - now forget the cattle - the ash is getting heavier. We don't have enough hay to feed all of them for 2 years, so they're going to die anyway."

OK Dear, I'm just moving several pregnant cows and a bull into the barn. We should have enough feed for them, and they can repopulate the herd later."

"Good thinking, now hurry up and get inside."

*** Somewhere near Grass Valley, California, just west of the Sierra Nevadas, early that morning ***

"Hurry Dear, get into the raft with the kids. It's your only chance of survival. The flood waters will be here any second."

"Please Larry, come with us!"

"I'd love to Melissa, but which of the kids would you leave behind for me? The boat can't take the weight of me, the kids, and a minimal amount of supplies. Everything's lashed into the raft, including the kids in their life preservers. The supplies are in waterproof River Runner Bags. I love you, take care of the kids - See you later!"

Larry took what little time he had, inflated the raft, threw his BOB and some food into a couple of River Runner bags, lashed them to the raft, then put their kids into their PFD's, and lashed them to the seats so they were sitting on the floor of the raft with their backs to the seat, so no matter what happened, their heads would be above water unless the raft overturned. There wasn't anything he could do to prevent that but pray, and he hadn't stopped praying since he heard the warning.

Melissa cried knowing she'd never see Larry again. He had his own PFD, and a small survival kit strapped to his waist. NOAA weather radio had broadcast a warning about half an hour ago that a 10-foot wall of water was headed down river, and would reach them in the next 30 minutes. Larry thought fast, grabbed the river runner raft they had purchased for running the Sacramento and Kern rivers. He knew within a pound the maximum weight the boat was designed for, and realized with Melissa, the two children, and a weeks' worth of food and supplies, they'd be 250 pounds overloaded with his additional weight. He loved his wife and kids desperately, and this was the only way he knew they had a chance to survive. High ground was over 20 miles and 3 bridges away, and the radio was reporting massive traffic jams as everyone tried to get to high ground at the same time. He knelt and prayed with Melissa that God would see them through this, then he held and kissed each of his kids.

None of the kids were strong enough to paddle, so Melissa would have to try and steer the raft away from any big boulders or snags, then once the flood had passed, find a safe spot to beach the raft, and try and help her husband, who was going to tie a 50-foot rope to the back of the raft and attach the other end to his PFD. This way, even if they died, they'd die together. Unknown to Melissa, Larry had his River Runner Knife on his PFD, and at the first sign that he was endangering his family, he'd cut away and leave his fate up to God. He'd already made his peace with God, and knew that if he died he was going to heaven.

He heard a roaring in the distance and yelled over it "Melissa, I love you - Hang on and Pray!"

Two seconds later, the wave overtook them and Larry was jerked off his feet. He held his breath and prayed. The last thing he did before the wave hit was to tie a good knot in the rope from the raft to the D-ring on his PFD. He knew it wouldn't take much strain, but would hopefully keep them together if they survived.

*** Later that Morning, Seattle, Washington, at the Starbucks ***

"I'll have a double latte with sprinkles to go."

Suddenly the radio switched from the Talk Radio Program they were listening to, and the EAS tones sounded.

"USGS has issued a Level III Volcano Alert for Mt. Rainier. Pyroclastic flow, and Lahars are expected to sweep into Seattle and surrounding areas. This updates previous warnings and includes the Seattle Area in the Warning Area. Please stay tuned for updates."

"Ken Dear, what's with all these Alerts - they're not going to cancel the Gay Pride Parade today?"

"I don't know Sammie, why not call Ronnie and find out."

"Ronnie, it's Sammie, it's still on, great see you then sweetie."

*** Later that afternoon in Downtown Seattle ***

The marchers were all lined up, and starting the march when a huge explosion rocked the area, knocking all the Drag Queens off their high heels like dominos. The people who were able to looked up and saw a huge plume of ash coming out of Mt. Rainier. Sammie's final thought right before he was enveloped in the pyroclastic flow was "Oh Shit, this is gonna hurt!"

*** Later that afternoon, Antelope Valley, CA ***

"Mr. Andrews, I found a ranch right up the road. It's abandoned, and has a fall-out shelter underneath the house, in the basement with plenty of food and water."

"Good Job, Ricky, let's gather the rest of the troop and get secured before the ash starts falling any harder."

Ricky and Mr. Andrews blew 3 times on their whistles, waited 1 minute, and blew 3 times again - their whistle call for "Rally here". Slowly the mixed group of teenagers walked back to where Scoutmaster Bob Andrews and Eagle Scout candidate Ricky Hernandez were standing. They were Explorer Scouts on a desert camping trip when the warning came over the radio. Their van broke down 5 miles east of there, and they started hiking and checking out ranches for suitable shelter. Scoutmaster Andrews explained what they were looking for. "We need good overhead cover, water, food, air, and enough space to sleep, eat and use the bathroom with some comfort. Any place you find food or water, but not enough shelter, get some help, and carry what you can. When you locate a good shelter, come back to me on the road, and we'll rally everyone. You need to work fast, because the ash will start falling heavier and heavier, and once it's a couple of feet thick, we won't be able to walk anymore."

Once everyone was assembled, Ricky led them to the ranch he had found up the road. Scoutmaster Andrews would have liked something bigger, but this basement shelter was the entire width of the building, well equipped with plenty of food, water, a pretty nice air filtration system, a propane powered generator to charge the batteries that ran the low-power DC lights

and water pump. It even had a small bathroom with a commode and a stand-up shower. Bob knew that out here it was tied into a septic tank, and he hoped the water was from an artesian well. Between what food they had scavenged from other ranches, plus what they had there, they should be OK for 6-12 months if they limited their food intake to 1 meal per day. Looking around, Bob spotted a CB and a 50-watt mobile 2-meter ham radio connected to a large deep-cycle battery, and hoped it was fully charged. It was kind of pointless to call for help right now, so he decided that they'd shelter here, and hope the ash would settle down before their food ran out.

Chapter 21

*** Later that Same day near Mt. St. Helens, Washington ***

Kenneth Mason drove his brand-new Dodge Ramcharger to Swift Reservoir and backed down the boat ramp at 0600 that morning, like he did 3 times a week for the last couple of years. "Good thing I like fishing, or I'd get bored with retirement" was Ken's favorite saying. He received a lump-sum retirement offer from his employer, and took it. His house was paid off, his kids were grown, and his wife had died a couple of years ago in a traffic accident. The license plate bracket on his Dodge said "Fishin' Fool" and several bumper stickers included such nuggets as "The worst day fishing is better than the best day at work!" When he finally got the trailer in the water, he got out, set the chocks behind the wheels of the truck, and waded into the cold water to back the boat off the trailer and beach it while he parked the truck and trailer. He started the 25 horsepower Evinrude motor, and backed the 15 ft Alaskan Smokercraft off the trailer. Once he had it beached, he walked over to the truck, removed the chocks, and drove back up the ramp to park it in his parking spot. As a joke, the manager of the reservoir had Ken's name painted on his favorite parking spot the last time they painted the lot. Everyone thought it was funny, but no one parked in "Ken's spot".

Ken knew the reservoir like the back of his hand, and was hoping to finally catch a record 7 pound Kokanee. He'd caught several 5 -pounders, but the record had eluded him. Today he knew he could catch the record. The conditions were prefect, and he had his favorite lure and fresh line on the reel. He motored over to his "secret fishing hole" and started trolling with a wedding ring spinner and white corn for bait. Several hours later, he felt a bite, and waited a few seconds, then set the hook. He fought the fish for over an hour since he was using light tackle to make sure a 7-pound Kokanee would be a record. Finally he got the fish to the surface, carefully reached out with his bare hand, grabbed the fish by the tail and hauled it aboard. He was busy taking the hook out, and just confirmed the fish's weight at 7 pounds 6 ounces when a ominous "Boom" echoed behind him. He turned around, and Mt. St. Helens had blown her top for the second time in 50 years! The lake was only 7 miles away from the summit, so Kent knew that running was pointless, and he watched Death come pouring down the mountainside in the form of a massive Pyroclastic Cloud. He had enough time to say a quick prayer, then the lake, boat, trees, and Ken were destroyed in an instant by superheated gasses and ash in the pyroclastic flow.

*** Later that day, somewhere about 20 miles west of Grass Valley, CA***

The wave swept over their raft, picking it up and throwing it forward. Unknown to either of them, the drag caused by towing Larry was what saved their lives, or the boat would have been pitched forward by the wave, where they would have overturned, swamped and drowned. Instead, Larry acted as a sea anchor, keeping the back of the boat in tight to the wave, and they

surfed it downstream until it ran out of steam as the riverbed widened. With the wave spent, and the boat floating safely, Melissa checked on her two kids, who were crying hysterically, but otherwise OK. Fearing what had happened to Larry, she found the rope that attached Larry to the raft and pulled frantically. Larry's unconscious body floated to her side. Melissa screamed, and started mouth to mouth resuscitation. After what seemed an eternity, but was only maybe a couple of minutes, Larry sputtered, coughed up a bunch of water, and took a deep breath. Melissa cried, held her husband, and paddled like mad for the nearest shore. She jumped out, beached the boat, then got Larry ashore and comfortable, then checked on her kids. Larry was breathing OK, so he started making a fire in case he was suffering from hypothermia, then got his wet clothes off, and got him into a Mylar sleeping bag next to the fire. She held him until he fully regained consciousness, praying her husband would live.

*** Later that day, near Winnemucca, NV ***

Martha was in the "storm shelter" waiting for Herbert when the door opened, and the ash-covered form of her husband staggered inside, fighting for breath. Martha helped him get off the ash-covered coveralls, cleaned his face as best as she could, and wheeled the emergency bottled oxygen over to him, made him sit down at the table, gave him the nasal cannula, set the flow for 3 liters per minute, and watched him breathe for 5 minutes until his color returned, and his breathing was less labored.

"Herbert - that was the dumbest thing you've ever done - you know anything like dust or pollen makes your emphysema worse! Now sit here and get your breathing under control, or I'll make you take a Nebulizer treatment."

Martha was a retired nurse, and Herbert was a retired hard rock miner with a minor case of silicosis. As long as he took it easy, took his meds, and wore the proper protective gear when he was around dust or pollen, he was fine. This time he ran out to save the herd without thinking, and nearly paid for his haste with his life. Herbert had designed their shelter based on Midwest designs for tornado shelters where the occupants could get buried in, and made the outer door to open outward, counterbalanced it, and mounted it flush with the ground on a 45degree slant with 4 huge bolts that slid into the steel frame to hold the door securely. At the bottom of the 20-foot staircase was a huge pit and a steel grate, so any debris on the door would fall through the grate and fill the pit instead of block the door. The inner door was upright and opened inward with 8 1" bolts and a locking wheel like a bank vault. He constructed a Sally Port between the staircase and the inner door by offsetting the staircase and inner door by 10 feet, and incorporating a double-ninety degree bend to trap any fallout that made it through the outer door in the corridor. 1 security feature that his shelter had that most of the Midwestern ones didn't was the steel grates that covered the corridor floor could be charged to over 100,000 volts by flipping a switch. If anyone touched the metal walls or the door when the grate was energized, they'd ground themselves and would get blasted out of their boots.

Once he recovered, Herbert showed Martha some hidden features of their shelter, including the Armory.

"It's a good thing you didn't show this to me until now, or I would have known you were nuts - what are you planning on doing, starting WWIII?"

"Dear, need I remind you we live along a prime invasion route. If there was a nuclear exchange, and the Chinese decided to invade while we were recovering, we'd need all the firepower we could muster to survive. Also, what if something like this happened, and thousands of starving people descended on our ranch, willing to kill us for the little bit of supplies we have?"

"Why would they do that?"

You've lead a sheltered life Martha. Remember when I did that tour in Vietnam?"

"Vaguely, we were both much younger then."

"Well let me tell you - desperate people will do desperate things to survive, including killing and possibly eating us to survive another day. Also, if law and order fail, the Criminal Element will soon be on the loose, looting pillaging and raping because that's what they do best. They don't know how to live as decent citizens, and without the restraining hand of the law to stop them, they do as they please. Hopefully you remember everything I taught you about shooting a rifle, because I can't defend this place by myself."

"What if I don't want to?"

"Then why in God's Name did we go into this shelter? We could have just sat outside and died! You had it too easy growing up in an affluent neighborhood, where the police would come every time you called, the trash was always picked up, and nobody really did anything to harm anyone else, and if they did they were sent to jail or prison for a long time. Well, let me tell you - the trash won't get picked up anymore, the police won't come when you call, and if the place catches fire, you better be prepared to put it out yourself."

"You're such a Gloom and Doomer!"

"No dear, just a realist! I knew that the party couldn't last much longer, and something somewhere had to break. Fortunately for us, it was a distant set of volcanoes and earthquakes that brought reality crashing back down. Life as we know it has changed, at least for our lifetimes."

"I want my old life back!"

"That's gone forever, you either adapt or die, and frankly I'd rather live even if we have to step back to the 1800's than die. I need you and want you to live, so you're going to have to come up with a reason to want to live. Maybe you can use your nursing skills to save some lives after the worst of this is over."

Martha brightened appreciably when Herbert told her that - she thought she'd spend the rest of her life in this cramped shelter eating MRE's and waiting for the end.

*** Early the Next Morning, near Antelope Valley, CA ***

Once everyone had a good night's sleep, they were feeling better, and started exploring the shelter that would be their home until the ash fall slowed down enough to allow them to travel. Bob was impressed that the 8 teenage Explorer Scouts had started inventorying their supplies shortly after they got up. It was an evenly mixed group of boys and girls, and the lowest ranking Explorer had just earned his Star Scout rank, and he had 4 Eagle Scout candidates in his troop. They were as well prepared as they could be, and came from rural families, so they were used to hard work. Ricky wasn't only an Eagle Scout candidate, but Valedictorian at his high school with a 4.0 grade point average. He was also a natural leader, and right now the other scouts were looking to him for leadership. Bob took a minute to reflect on what had happened, and the fact that his family, and the families of his scouts were now probably dead when the Long Valley Caldera let go. They only survived by being far enough South from the caldera to escape the worst of the eruption. They heard on the radio that the snowpack on the Sierras had melted almost instantly from the hot gasses, and they were pretty sure that their small town on the western foothills of the Sierra would be buried under hundreds of feet of mud. They were going to have to survive for quite a while with what they had in their packs, their survival knowledge, and what they could scavenge.

Ricky broke Bob's reverie by telling him he found a locked cabinet. In a basement shelter, that could only mean 1 thing - gun cabinet! Bob asked if anyone knew how to open it, and Ricky sheepishly raised his hand, and admitted that he wasn't always the squeaky clean kid he appeared to be, and his buddies in his old East LA gang had shown him how to pick locks and break into cars. Bob told him to go ahead - their survival was depending on any skills they had regardless of how they acquired them. Ricky spotted a large paper clip, bent it in half, bent a couple of funny shapes into it, and used them to pick the lock of the cabinet. 5 minutes later, the door was open, and Bob was standing there open-mouthed. Whoever owned this ranch was really into guns and rifles. He had a Remington 7mm Magnum with a really nice Leupold scope, an AR-10T with a Redfield high-magnification scope, 2 Match-grade AR-15's with the heavy barrel and the flat top receiver and a target scope mounted onto a rail. Behind that was some second line equipment including a scoped 8mm Mauser, 2 SKS's, and a Mini-14 with a folding stock. On the top were several .45acp pistols including a nice Kimber, a Para-Ord, and 4 Glocks. Bob was curious about the Glocks, but figured that they could give them to neighbors to arm themselves and not take much training to get up to speed.

In the bottom of the cabinet on top of several cases of ammo was a box full of military manuals, including FM 7-10 "THE INFANTRY RIFLE COMPANY", FM 23-10 "SNIPER TRAINING", FM 3-06-11 "URBAN WARFARE", and several other books including medical manuals, and the Anarchist Cookbook. Bob wondered what that was doing in there, then he realized that whoever owned this place before was anticipating the possibility of guerrilla warfare, or was a member of one of those Patriot Militias he read about. When he read the inventory sheet Ricky handed him, he was sure he was a member of a militia. All the first aid supplies were in large enough quantities to serve a field hospital, or at least an aid station, and he had way more ammo than he needed for his guns, plus reloading supplies to make even more. At the very least, all the reading material should keep everyone occupied until they could come out in a couple of months.

Chapter 22

*** Early the next morning, somewhere 20 miles west of Grass Valley, CA ***

Larry woke up at first light, and wished he hadn't. He felt like someone had stuffed him in a gunny sack and beat it with a baseball bat all afternoon. Every time he breathed something hurt. He knew his ribs were bruised, and by slowly moving his arms and legs and wiggling his fingers and toes, he realized his arms and legs weren't broken, but he was going to have an interesting set of bruises for a while. When he moved, Melissa stirred, and seeing Larry was awake and alive, wrapped him in a bear hug. Larry barely stifled a scream of pain, and realizing her husband was hurt, she let go quickly. Turning to her kids, she was grateful they were sleeping peacefully.

"You Ok Larry?"

"My ribs... think they're bruised or broken - don't touch."

Melissa could barely hear him over the noise of the river, but understood he had hurt his ribs. She opened one of the river runner bags, took out an air mattress, inflated it, and helped him lay down on the much more comfortable surface. It was worth the agony of moving, because as soon as his body settled on the air mattress, he felt much better. She removed his fanny pack to make him even more comfortable, and was amazed that his Glock 21 had survived the trip. The Kydex holster was scratched, but the gun didn't look worse for the wear, and the magazine was still seated. She took it out of the holster, field stripped it, took out the cleaning kit and ran the enclosed bore brush down the barrel to clean the dirt out of the barrel, wiped off the rest of the parts, lubricated it with a couple of drops from the small bottle of CLP and reassembled it. Before she put the magazine back in, she racked the slide and made sure everything worked. Finally she replaced the magazine and stuck the gun back in the holster and turned to check on her kids. They were finally awake, and needed to go to the bathroom. She pointed out a nearby tree, and told them to go ahead and water it, but not to go any further away from her. 5 minutes later, they were back, and Melissa gave them a bar of hotel soap, and told them to wash their hands. They cleaned up in a nearby quiet pool, and came back to the fire. She took some oatmeal out of their kit, and made a pot for the 4 of them. Larry was hurting so bad that he didn't dare move his arms to feed himself, so Melissa fed him some oatmeal, and 4 Advil. He went to sleep shortly after that, but before he did, he told Melissa to keep the fire burning, and to wear his fanny pack. If someone approached them and she didn't trust them, she should protect herself and the kids by any means necessary.

Melissa was stunned, she'd never fired the Glock in anger before, or even pointed it at someone. Defending the family had always been Larry's job. Suddenly she realized Larry couldn't lift a finger in his current condition, and it was up to her to defend them. She took the

Glock out, cycled the action, and topped the magazine from the ziploc bag full of ammo Larry had in his kit. When she finished, she carefully reholstered the Glock, and checked on her kids. They were looking at her with wide eyes, so she explained that Daddy wasn't feeling good, and he told her to make sure everyone was safe. She told them to go find some pieces of wood on the ground so they could keep the fire burning. With all the driftwood deposited by the flood, that wasn't too hard to do. They brought back armloads of wood, and she chopped the larger branches to a more convenient size using their Gerber hatchet. She built the fire into a signal fire, in case someone was looking for survivors.

*** 0900 the same morning, near Winnemucca, NV ***

Herbert and Martha got out of bed, used the bathroom, then started planning what they were going to do for the next couple of weeks until the ash stopped falling. Martha had stored plenty of crafts for her to do, and her favorite Bible. Herbert had brought down a box of books, a checker board, a pack of legal pads and pencils in case he felt like writing a journal, and a deck of cards. Martha started breakfast. She took several minutes to check out the pantry, and wished Herbert had consulted with her when he made up the pantry. All he had were long-term storage foods in cans that had been nitrogen packed. She wasn't used to cooking with dehydrated foods, so she asked Herbert for help. He showed her a notebook with recipes that used the dehydrated food, along with rehydration instructions. She decided that the easiest thing to make for breakfast would be pancakes and eggs using the scrambled egg powder, which looked like it was the easiest to use. She started the propane stove, got her cast iron griddle hot, added a little oil to the surface, and while it was getting hot, she mixed the batter, and added the right amount of water to the egg mix, and let it sit to rehydrate.

When the griddle was smoking hot, she added a small ladle full of pancake batter on one side, then did it again on the other. The griddle was just big enough to make 2 pancakes at a time, which was OK for them, they didn't eat that many anyway. In a small Teflon pan, she heated some butter, and added the egg mixture and seasoned it well. As the eggs started to set and cook, she was pleasantly surprised that they behaved just like regular scrambled eggs. Minutes later, breakfast was ready. Herbert set the table, and they had pancakes with real maple syrup and scrambled eggs for breakfast, and a pot of coffee they had staying hot on the stove. Herbert said grace, and they ate quietly. When breakfast was over, Martha took out her bible, and Herbert pulled out a favorite ranching magazine, and they sat down to read.

*** 0800 the same morning, near Antelope Valley, CA ***

As soon as everyone was up, they started breakfast, and checked the roster for showers. They didn't have the fuel for everyone to shower every day, so they agreed to let the girls shower every day, and the guys could skip a day between showers since they weren't working up a sweat. The Girls were told to limit their showers to two minutes each. They started complaining, and Bob told them it was either two minutes each day, or two minutes every other

day like the guys. They piped right down after that. Once the showers were finished, breakfast was served. When everyone was finished eating, they cleaned the dishes, and checked the roster for their daily assignments. They cleaned the shelter top to bottom, washed clothes and hung them up to dry before anyone sat down to read or anything else. Bob called a meeting in the central room when they were finished.

"Ok, gather round. I've been reviewing these books he had stashed and come to the conclusion that life as we knew it ended when the Long Valley Caldera blew its top. I'm not going to sugar coat it - you're probably the only surviving members of your families, and you need to learn how to defend yourselves, how to shoot, and how to act as an organized team as we move further west once the ash clears. I'm going to make reading assignments, and we're going to quiz each other on this. We need to know this cold, it might save our lives out there. Any questions?"

"Who gets what rifle?"

"I'll assign weapons based on shooting scores. Anyone who doesn't think they could look someone in the eye when they shoot them, let me know right now, and I'll assign you the short-range weapons. I need 3 long-distance shooters that can take out a threat with 1 shot, and 2 medium range shooters that are good with scopes. The rest of you will be the cleanup committee and get whatever gets past the long range shooters."

One of the girls raised her hand "Mr. Andrews, I don't know if I can shoot anyone."

"Ok Diana - let me lay things out for you. Civilization as we knew it is gone, maybe for good.

- 1) Anyone you see could be a possible threat.
- 2) Women are going to be at a premium men will fight and die over them.
- 3) Some men won't care whether you want to have sex with them or not.
- 4) In the event we're attacked and defeated, you could be either raped and killed, or raped and taken prisoner for more abuse later.
- 5) The only way to prevent #3 and #4 from happening is to kill them first."

Diana and the other two girls huddled together shaking at the images in their minds. Ricky was sitting next to them, and protectively wrapped his arms around them. He whispered to them "Diana, don't worry, as long as I'm alive, I won't let that happen to you, but I need your help. Can you try to learn how to shoot?"

Diana wiped a tear from her eyes and nodded. Ricky tenderly kissed her on the forehead then got up to speak privately with Scoutmaster Andrews.

"Mr. Andrews, let's go slow about the idea of shooting people for now - let's try to get the girls interested in the first aid stuff first, then when the ash clears, we can teach them how to shoot."

"OK Ricky - I think I overplayed my hand. You know I was in Desert Storm II?"

"I remember something about that - what was it like?"

"Hell on earth - the damn Iraqis used mines and improvised explosives to slow us down, kill or maim us. Most of the men in my patrol were wounded at 1 time or another by IED's or mines. We'll have to be careful out there."

"OK, let me know what you want me to do."

Ricky walked back, and they were passing out manuals. He made sure the girls got the first aid manuals first. They spent the day reading the manuals and playing games when they weren't cleaning and organizing. Dinner was usually chilli or a pot of rice and beans. A couple of times a week, Bob opened one of their limited cans of SPAM and made a special dinner or breakfast.

After dinner that night, Bob fell asleep and was dreaming about how they got where they were. The Lakeshore, CA Explorer Scouts were camping in the desert between Edwards AFB and Fort Irwin, heard the warning on the radio, and packed up quickly as Big Bear erupted. Once it stopped, he knew the safest direction was through the ash west into Los Angeles because the USGS had issued a warning about Mammoth Lake, which was right next door to their community of Lakeshore, about 40 miles northeast of Fresno, CA. There was nothing to their east but open desert, with little or no fresh water or shelter. They loaded up the van, and made it southwest on 395 as far as Hesperia when a CHP cruiser blocking the road detoured them west toward Pinion Hills, saying the road ahead was blocked by a lava flow. They got gas in Hesperia, and drove as far as they could, looking for a route West away from the ashfall, which was getting heavier by the hour. Everyone was wearing a bandana over their mouth and nose, and the windows were rolled up in the van despite the suffocating heat. Scoutmaster Andrews and Ricky Henderson were checking the map as they drove, and located the Angeles Crest Highway that went through the Angeles National Forest. They made it to the road right as the engine gave up the ghost. They still had gas in the tank according to the gauge, and Ricky told Mr. Andrews that the carburetor probably ingested too much ash and couldn't breathe, which would prevent the car from running. Even if they removed the air filter, they'd only get another couple of miles before the ash destroyed the engine. With the ash getting heavier, they weren't in a good position to do a roadside repair, even if they could fix it, because opening the

air cleaner under those conditions would just allow more ash to get into the carb and make things worse.

Bob made an executive decision that would later prove to be the one that saved their lives, and ordered them to abandon the vehicle, taking everything they could carry that was even remotely useful. He reminded everyone that they needed to protect their airways, and they all took their bandanas off, smacked them on their thighs which knocked the dust off. Everyone was wearing hats and sunglasses, eyeglasses, or goggles, whatever they had available. Still they were getting ash in their eyes, and they stopped more than once and wash someone's eyes with Normal Saline from their kit. As they cleaned out the van, they distributed the load between their backpacks and started hiking up the road. Bob told them to check out every ranch on the road, and if they found an abandoned one, to stop and check it out to see if it had an emergency shelter with enough food and water for all 9 of them for up to a year. They paired off into teams and started walking up the road. Some ranches were occupied, but couldn't take them in. They did allow them to take as much water as they could carry, and they filled their canteens and water carriers every chance they could. Several gave them food and water. Each night they found a ranch that gave them permission to camp in their field, and they pushed on the next morning heading West on the Angeles Crest Highway. They didn't find a suitable abandoned ranch until almost a week later, when they found 1 that later turned out to be 1 of Larry's neighbors who was gone too.

Bob woke the next morning feeling poorly, so he took a pill from his dwindling supply of heart medicine, thinking to himself "I'm too old for this Sh#t!" Years ago, the Army discovered Bob had heart problems in a routine physical that were bad enough to get him medically discharged from the Army and get a small disability pension that paid his rent, food, and medical bills. He spent his free time as an Explorer Scoutmaster since he was single and didn't have any children of his own. He enjoyed working with Teenagers, and related well to them. Over the years, he had formed friendships with the scouts. The local scouting district awarded him the Outstanding Scoutmaster award several years ago when he had 3 Eagle Scouts in his troop. Now he had 4 Eagle Scout candidates, but when things went Kablooey, they were pretty sure they'd never receive their Eagle badges. Bob explained to them that they now had a higher calling, and needed to help him make sure the troop survived.

Ricky and the other candidates understood in that instant their lives had changed forever. They were all from Rural families that hunted, fished, and camped on a regular basis, so they were comfortable outdoors. The scenario they were facing was so new to them that Scoutmaster Andrews had to sit them down on a regular basis and explain things to them when he saw them going into shock. It wasn't physical shock, like you'd treat someone for, but psychic shock, or shell-shock, and they needed a head-check every now and then to keep them focused on what they needed to do to survive. Over the weeks in the shelter, they read all the manuals, and learned quickly. They had zero practical knowledge since they couldn't go outside yet and practice. Bob decided that he'd fix that once the ash stopped falling.

They tried to keep busy during the enforced confinement. Bret made up a duty roster to keep everyone as busy as possible. Jeremy and Natalie were assigned keeping the steam generator full of wood in the morning, and checking on the Tilapia and hydroponic system while they were there. Allen used the Bobcat to clean out the horse corral every morning, and spread clean hay for the horses while Veronica, Margie and Nancy took care of the horses, chickens and pigs. Bret, Brad, Bear, and Leroy were assigned the toughest job of keeping the ash off the solar panels as much as possible, and other outside cleanup chores. 2 weeks later, the ash fall slowed enough that Bret decided to send everyone out to check on their houses and clean off their roofs. He had plenty of brooms, rope and ladders for everyone, and the couples worked as teams, with the men sweeping, tied off by a rope draped over the other side of the roof, with their wives belaying them on the opposite side. Their wives literally held their husband's lives in their hands! It took the whole day, but everyone came back reporting their roofs were still intact. Allen was holding onto Veronica and kissing her, so Bret asked him what happened. "I slipped on the roof, and if it weren't for Veronica sitting down on the other side belaying me, I would have fallen off the roof and seriously hurt myself."

Bret laughed in spite of himself, and said "I guess that's one way to make you trust your wife!" Allen realized his dad was teasing him - he trusted Veronica with his life already. He had to admit that having her hold onto the rope that kept him from falling definitely made him appreciate her even more. Kelly was teasing Brad, claiming that he either needed to lose weight, or they needed a tractor to tie off to the next time he cleaned off the roof. Bret laughed, thinking how much fun Kelly had belaying Brad. She weighed maybe 120 pounds soaking wet, and on a good day Brad tipped the scales at right around 300 pounds. The Sons of Satan named him well when they called him Moose! Gloria and Jim had an uneventful trip, cleared the ash off their roof, and checked the interior - there wasn't as much ash as last time, probably because they had more time to prep their house, and knew what to do differently when they cleaned their house last time and noticed cracks in windows and doors they didn't see before. This time they sealed the house practically air tight, and there wasn't much ash inside the house, but the outside was covered almost 6 inches deep. Bret hoped the ash wouldn't accumulate much faster than that - and especially that it wouldn't rain while the houses were covered with ash, since volcanic ash could absorb up to 10 times it's weight in water.

Bret put the cleaning supplies up, and they gathered in Bret's house for dinner. Every Sunday they got together for a Worship Service and dinner, which helped keep them together as a community, and kept them caught up with everyone's lives. After dinner, they retired to the living room to talk and play games. Later that evening they went back out the door, walked under the enclosed walkway, and went to bed in their new shelter.

Chapter 23

The next morning, Brad had a brilliant idea, and sat down with Leroy to design a command-detonated anti-vehicle mine. He had several pounds of C-4 and several spare electrical detonators since he only used 1 per mine instead of the recommended 2. He got an idea from the Claymores to build an improvised anti-vehicle mine, and when he told Leroy, he knew it would work.

"Leroy, I've got an idea for a command detonated anti-vehicle mine. We've got several pounds of C-4 that we really don't need for anything else, since a couple of turns of Primacord wrapped around the truck of a tree will drop it as well as a chunk of C-4. I saved some electrical detonators and I wired some spare radios to act as detonators."

"Sounds like a plan - the Iraqis were pretty good with IED's and I remember some of their designs were pretty primitive, but worked great. What did you have in mind?"

"I was thinking I had a 12x12 sheet metal box, a couple of 1/4" steel plates and a bunch of quart jars full of miscellaneous nuts and bolts. I'm sure I've got a big jar of epoxy cement somewhere."

"I get it, kind of like an oversized Claymore mine, but mounted so the blast goes upward - Cool!"

"If I use a pound of C-4, that gives us 3 pounds left, plus the Primacord. I imagine just the C-4 would wreck anybody's day. If we add a plate full of large nuts and bolts on top, that should get the occupants as well. I need to get over to my place as soon as the ash stops, and put this together. Since it's command-detonated, it will be perfectly safe to drive over, until we decided to detonate it - but that means someone will have to have eyes on the mine to successfully detonate it as a vehicle drives over it."

Between Leroy and Brad, they sketched out a workable design. Leroy knew from his days in the USMC how a Claymore mine was put together, and based their design on that. They'd have to be careful fitting the lid. The bomb should be waterproof, or at least water resistant to make sure it would fire after being buried for a year or more.

That same day, near Antelope Valley

CREEEEK...GROAN!!!

"What was that?" Ricky yelled at Scoutmaster Andrews.

"Probably nothing good - I remembered reading something about how much moisture volcanic ash could absorb. That rain shower last night might have overloaded the roof. We need to get out of here right now, and I'll clean off the roof while you and the rest of the Scouts belay me with 2 ropes."

They climbed out of the shelter, wearing their bandanas and goggles. Bob could see the roof sagging, and knew that they had to get that roof cleared off right now before it collapsed any further and buried the entrance to their shelter. They quickly tied two ropes to Bob's waist, and taking a grain shovel, he quickly climbed the extension ladder. When he reached the top, he threw the rope over. He'd already told both belay teams that 1 tug meant tension, and 3 tugs meant slack. Once he was sure the other side had the rope, he pulled on it, and the rope went taut. He tugged 3 times on Ricky's rope, and he got some slack so he could move. He climbed carefully onto the roof, and started shoveling ash off the roof. Unknown to the rest of the Scouts, Bob ran out of his medicine a while ago, but wasn't symptomatic because he wasn't exerting himself. Now between shoveling, and breathing hard through the clogged bandana, Bob could feel the onset of an Angina attack.

He knew that he needed to get the roof cleared off for the kids to have a chance to survive, so he ignored his symptoms and kept working, and got most of the roof cleared off before a crushing chest pain reminded him why the docs told him to take it easy and take his meds. As he fell unconscious to the roof, Ricky saw him fall and knew something was wrong, and ran around the other side, and yelled at them to lower Bob down NOW. As he ran back around, he could see Scoutmaster Andrews' body hung up on the gutter. He grabbed the ladder, set it next to him, freed his body and guided it to the ground, where he immediately began CPR. As soon as they saw what had happened, the other scouts gathered around, and began 2-man CPR, knowing that they might be working on a dead man. Almost 10 minutes later, Diana came running around the corner carrying a medical bag. None of them had any medical training past First Responder, so all they could do with the bag was to use the stethoscope to listen to Bob's heart and what Ricky heard made him break down and cry - there was absolutely no heartbeat when he put it to Bob's chest. Just to make sure, he put it to his own chest, and clearly heard his heartbeat. Next he felt Bob's neck for the jugular vein, and he had no pulse. Ricky broke down crying, and closed Scoutmaster Andrews' eyes. The rest of the scouts immediately knew their beloved Scoutmaster was dead, and they were on their own. They gathered together in a group hug for mutual support, then got a tarp and some shovels and buried Bob's body. Ricky read from the Bible, then they went inside.

The next morning, they debated what to do - they were low on food, and were totally on their own. Ricky told them there was a CB and a Ham radio in the shelter, and the last time they were out, he checked the antennas, and they were still connected. They agreed to use the radios, and voted that Ricky would use them, since he had the most mature-sounding voice of all of them. Ricky knew if 1 of the girls got on the radio, it might attract the wrong kind of attention.

First they tried the ham radio, and had no luck. Ricky remembered that a 2-meter radio, which was what they had, only worked by line of sight, but CB frequencies behaved more like AM radio, and might get over the mountain and reach someone who could help.

Reaching for the microphone, he flipped the channel selector to Channel 9 - the CB emergency frequency and made sure the power was on. "Mayday, Mayday, Mayday!" He repeated the call 5 times when he heard a man reply "Go ahead Mayday, you're scratchy but readable."

"Thank God someone heard us. This is Ricky Hernandez with the Lakeshore Explorer Scouts Troop 15. Our scoutmaster's dead, and we're just about out of food."

"How many are there?"

"8 total, we're all teenagers"

"Everyone OK?"

"Just scared."

"How much longer can you hold out - how much food do you have?"

"Maybe a couple of weeks. If we eat all of it, we can't hike out - there's almost a foot of ash on the ground and it's slow going."

"Where you from Ricky?"

"Lakeshore California."

"Oh My God - how'd you survive?"

"We were camping near Edwards AFB when Big Bear let go. We heard the warning about Mammoth mountain and decided to head West on 395. We made it as far as Hesperia when the CHP diverted us North, and we found the Angeles Crest Highway went west. Scoutmaster Andrews decided the safest route out of the ash fall was to the west, and we almost made it. The Van died right as we started climbing the hill, and we've hiked about 5 miles since then."

"Ok, don't say anything else. I know about where you are. Stay off the air, and I'll call you back on this channel in an hour."

"Maggie, get everyone together in the living room - right now!"

Once everyone was in the Living Room, Bret told them what had happened.

"I need to tell everyone something. I made contact with an Explorer Scout troop from Lakeshore California. If anyone doesn't know, it's in the western foothills of the Sierras, and probably got wiped out when Mammoth blew. Anyway, they made it to a ranch house near where Larry's was, and their Scoutmaster died, and they're low on food. I need to know what you want to do."

Nancy spoke first "I don't know about you, but if they're legitimate, I want to help. They're probably the only surviving members of their families, and they probably won't survive if we don't help."

Allen spoke up "Aren't Explorer's co-ed?"

"Normally - I get it, you were wondering if there would be any problems assimilating that many male teenagers?"

"Not exactly dad - I was more worried about the long-term survival of our community. It seems so far as we've traveled we're the only thriving community, and we're still way short on people, especially ones young enough to raise families. Without more kids, we're eventually doomed. You said something about 8 Explorers - we've got enough room to easily add them, how about food and supplies?"

Everyone looked at Maggie - she hated it but it came down to "can we feed them and not starve ourselves?"

"We've got enough food stored for our existing population for 10 years, if we can grow more vegetables, and the chickens and pigs keep reproducing we should have enough meat. The only thing we're going to run short of is grains. We can raise potatoes for starch, but eventually we'll run out of grain to feed the horses. As far as supplies go, we could conserve more."

Moose stood up "There's no way I could just let a bunch of kids die - Adults maybe - but not kids. I'm willing to take the risk." He looked down at Kelly, and her smile indicated she agreed with Brad.

"OK, now I'm going to need a show of hands - do we bring them here or not?"

Bret was grateful when all the hands in the room went up, even Zack and John's.

"I guess that settles that - I want you to listen in to the conversation when I contact them, but don't say anything until I tell you it's OK. Let's gather around the radio, and I'll call them back."

"Hello - Ricky, are you there?"

"Thank God - Yes whoever you are - I'm here!"

"We decided to come and get you."

"Who's We?"

Bret decided to risk it, and motioned Maggie to the microphone.

"Rick, this is Maggie, Bret's wife. It's OK. We've got family and friends staying with us, and more than enough room and food to take you all in - you said there was 8 of you, right?"

"Yes Ma'am."

"We're pretty sure we know where you are. We'll come and get you tomorrow, so make sure you're by the radio around 9 o'clock tomorrow morning. We'll be driving a big deuce and a half and a four-wheel drive diesel rock crawler called Babe. Don't be alarmed by the machine gun on the truck - it's for our protection. If you want to come out by yourself first to verify we're who we say we are, that's OK."

"Thanks Ma'am - see you tomorrow at 9!"

"What was that all about?"

"I assumed you would want Brad's machine gun mounted in case this was a trap. We'll drive Babe with the Machine Gun, and Bear and Nancy will follow in the Deuce and a half if they agree."

"What about Kelly and me?"

"Sorry Brad, but I think you'd scare them half to death!"

Everyone started laughing, knowing that Brad could look pretty menacing very easily.

Bear told Bret that they'd drive the deuce and a half, and Bret told them they would stay back a safe distance until he called and said the coast was clear.

The next morning, Brad had the M -60 fitted to a pintle mount on Babe. Bret was in a quandary - should Maggie drive or shoot? He finally decided he'd be a better shot with the gun, and there wasn't any terribly difficult terrain between here and there that required any special driving skills, so he let Maggie behind the wheel of Babe, something that only

happened twice before. He showed her how everything worked, what all the levers and switches were for. Before they mounted up, he had everyone put on the body armor and LBV's. Bear and Nancy each had a M-16/M -203 combo, and their LBV was loaded with loaded magazines and grenades. Bret had already gone over the radio codes for this trip, and knew what to do if he heard something over the radio. They all had their 2-meter handi-talkies set to the same frequency, and hoped that Ricky's compatriots weren't on that frequency. Bret assumed they knew next to nothing about radios, so he set the radios to an unused simplex frequency that wasn't near any of their local repeater frequencies, and made sure everyone's power switch was set on LOW, which would give them about a 5-mile range.

Two hours later, they called Ricky - they were at the turn for Larry's place. When Ricky heard them on the radio, Bret let go a blast on Babe's air horns. Ricky said he heard them, and Bret suggested Ricky meet them by the road side. 5 minutes later, Bret spotted a young man wearing a poncho, goggles and a bandana. As far as Bret could see, he wasn't openly armed. He nodded to Maggie, who put Babe in gear and drove up the corner. Ricky walked up, and stuck his hand out to shake Bret's hand. "You must be Bret, I'm Ricky Hernandez. There's 7 other Explorer Scouts in the basement of that ranch house."

"Ricky, I don't know how to ask you this without sounding like a creep, but how many girls are with you?"

"We're a coed Explorer troop, I'm the oldest, and there's 4 boys and 4 girls."

"Thank God, we were afraid that you were just 8 teenage boys. The 4 girls improve our odds for long term survival."

"Why's that Bret?"

"The more unrelated couples you have, the less likely a community would suffer from inbreeding. Just in case we're the only one's left around here, and have to survive on our own, some more unrelated women greatly improve our odds."

"Ok, I understand. You must be Maggie!"

Maggie reached over and shook Ricky's hand. "We need to get you back to our place and out of this ash fall. If you want, we'll come back later for anything you want to bring that can't fit in the trailers or the back of the deuce and a half behind us."

"The guy who owned this place must have been really into survival. He's got guns, ammo, first aid supplies, food and stuff. I don't know if we can bring it all today."

"Let's back the deuce and a half up to the basement door and get everybody and everything

loaded quickly."

Bret grabbed his hand held radio "Bear, All Clear."

Moments later, a huge Army Surplus truck came driving up the road. Ricky hadn't seen anything that big since MASH. Bear and Nancy got out, handed paper filter masks and goggles to anyone who needed one, and after introductions were made, Ricky told Bret "We've decided to stay with you guys, at least until this blows over."

"Why, where are you going to go - Glendale's a ghost town. I've been all over everything east of the 134 and it's either deserted, flat as a pancake, or on fire. The earthquake did even more damage west of Glendale, and I doubt anyone within 10 miles of the coast survived the Tsunami.

"What Tsunami?"

"You said you were camping in the desert - Before Big Bear let loose, did you feel an earthquake?"

"Yeah, but we thought it was just another quake."

"This was The Big One - the entire San Andreas Fault let go, resulting in an 8.5 plus quake, and most of the other fault lines in California let go as well. Several underwater landslides caused 100 foot tsunamis that flooded most of the coastal areas. What they didn't wreck, Big Bear and Mammoth Mountain finished. Now it looks like Yellowstone might go too!"

"Holy Chit Bret! If that let go - it would be the End of the World as we know it!"

"Good thing Bear brought his REM CD!"

Ricky glanced at Bear who shrugged and gave him a sheepish grin.

"Besides that, we've heard rumors that FEMA is gathering up the survivors and putting them into camps, and get this - NOT letting them go!"

"Kind of like the "Roach Motel" - They Check in, but they don't check out."

"Exactly, except in this case, I hope they don't feed them poisoned bait."

"Ok I guess this means we'll be staying a while."

Ricky introduced everyone around, and they started packing the trailers full of stuff they were

bringing with them. When Ricky came out staggering under the weight of a case of .223 ammo, Bret told him they had dollies to take care of that. He asked Ricky if they had checked out the ranch house. "Not Really Bret - we were kind of in a hurry to get into shelter and get out of the ash." Bret decided to investigate, opened the front door lock with his electric lock pick, and Maggie and him went through the house. It was pretty much intact, and was a treasure trove of supplies. Bret called Bear on the radio, and said they'd concentrate on packing the house while everyone else stripped the basement shelter bare. Bret found some old moving boxes in a closet, and took advantage of them and packed them as full as possible. Later that afternoon, the Explorers started helping pack the house, and by 3:00pm, they were done. Bear told Ricky the ride home might be little harsh, since all they had for seats was a bench he set it the bed of the truck, which was packed to the top with stuff. They secured the load, opened a sleeping pad to sit on, and leaned up against the load to make themselves comfortable. Just to be safe, Bear tied 2 ropes to the stakes to act as a seat belt for everyone. They slid their legs under the first one right above the bench, and the second one was about waist high. They were packed into the truck like sardines, and Bear made sure everyone went to the bathroom before they left, and gave them a liter bottle of cold water and some sandwiches for the trip.

Chapter 24

Ricky was grateful for the canvas top that kept most of the ash off them, even if it did make it darker in the back of the truck. Someone took out a light stick and opened it, and the dull green glow made it light enough to be able to eat and drink. With the truck bouncing and jostling, they got more water on them than in them, and managed to eat half their peanut butter and jelly sandwiches. They had arranged themselves boy-girl along the bench, and took the opportunity to cuddle for warmth and companionship. Ricky found himself attracted more and more to Diana since they'd been in the shelter, and she took the opportunity to lean against his shoulder. He had his left arm around her, and Sally sat on his right, leaning up against Ralph. Andrea was on the other side of Ralph, leaning up against Mark. Elisabeth was leaning against Ben, who was holding up the other side of the bench. All 8 Explorers were friends, but whenever they gathered around the evening campfire, they tended to couple up the same way every night.

2 hours later, the truck stopped, and Bear opened the flap and the tailgate. "Ok, everybody out, where home." Ricky's arm was asleep, and took a while to get it off Diana's shoulder, who seemed in no hurry to get off the bench either. Finally Ben broke the logjam saying he needed to use the bathroom, and jumped down from the bed of the deuce and a half. Bear showed him were to go while everyone else milled around. When Ben came back, everyone met out front then they quickly unloaded the trucks and trailers. Bret caught up with Ricky and told him "We'll have to put you up dormitory style for now, we've only got 2 spare bedrooms in the shelter."

"Bret, this is a strange looking house."

"It's called an earth-sheltered house, and according to what I've read, it's almost as good as a below ground bomb shelter. In the event of a nuclear war, we'd have to live in the basement for a while, but since there's no radioactivity, we can use both levels. We moved the earth aside, assembled several Quonset huts, poured 6-12 inches of reinforced concrete over them, and filled them back in. It never gets much cooler than 60 inside, or much warmer than 70 in the living quarters. Once we get everyone settled, I'll give you the grand tour."

They brought 8 military-style beds out of storage and quickly set them up while Maggie and Nancy finished making dinner. They added a couple of folding tables to the end of the kitchen table and managed to fit everyone in. While they were gone, Nancy had made a huge pot of Beef Stew and several loaves of sourdough bread. Once everyone was seated, Brad said Grace, and they dug in. After dinner, they all crowded into the living room to hear each other's stories. Ricky was nominated the Explorer's spokesman.

"We're from a small town in the Western Sierras called Lakeshore. Our Scoutmaster Bob

Andrews had planned this desert camping trip for months, and got all the required permits. We'd been camping out between Edwards AFB and Ft. Irwin when we felt a big jolt that went on for 30 seconds. We thought it was just another earthquake, and continued our camping trip. Right before we were headed home, Scoutmaster Andrews was checking the news, and heard that Big Bear had erupted, and we could see an ominous cloud about 100 miles to our southwest. We took shelter in a nearby building, and when we got low on food, Bob told us we had to head West to get out of the ash cloud as quickly as possible. We all piled in the van and drove down 395 as fast as we could. Even with the wipers running flat out, and the headlights on, we could barely see well enough to drive 40mph. We met up with a convoy of Marines headed toward LA, and got permission to ride with the convoy. They gave us some of their MRE's and water, since we were out.

When we reached Hesperia, the CHP wouldn't let civilians go any further west on 15 due to lava flow, so we had to abandon the convoy and headed North. We found a gas station with gasoline, filled up, and the station attendant let us use the bathroom and drink as much water as we could, then filled our water containers. Bob and I checked the map, and found the Angeles Crest Highway was the first road heading west from the road we were on. Just as we made the turn onto the highway, the van sputtered and died. We had a quarter tank of fuel, so we weren't out of gas. Mr. Andrews said the air filter was probably clogged, and judging by the way the van was running, it had already ingested a bunch of ash. We couldn't get the air filter clean, it was stuck full of ash, so Bob told us to gather anything useful from the van, and we'd have to abandon it and hike.

We stopped at every ranch along the way, some refused to help, some gave us food and water, and every night, we found a ranch that would let us pitch our tents on their property and get some sleep. It was hard to breathe, hard to see, and we had to keep stopping to flush ash out of someone's eyes, first with saline, then with whatever water we had. It took us 4 days to hike 5 miles under those conditions. We found several abandoned ranches, but they either didn't have shelters, or enough food and water for the 8 of us to stay 3-4 months. Finally I located the ranch you found us in, and he had a great shelter underneath his basement with food, water and enough space for the 8 of us including a small bathroom with a toilet and shower. Whoever built it used the exhaust heat from the generator to heat the water, so we could only take a 2-minute shower every other day. After being covered in ash for a week, we were just grateful to get clean again.

A couple of months later, we awoke to a creaking and groaning sound. Mr. Andrews guessed the roof might be collapsing, ordered everyone out of the shelter, then rigged up a set of ropes for us to belay him while he cleaned the roof. Just as he finished, he had a heart attack. We did what we could, but he was probably dead before we got him back on the ground. After doing CPR for almost 10 minutes, Diana gave me a stethoscope, and I checked Mr. Andrew's heart, and couldn't hear any heartbeat. I checked his pulse at his neck, and there was none. We buried him in the yard. The next day, we called you, and you came and got us."

Once everyone had finished asking Ricky questions, Bret filled the Explorers in on what had happened to them since the first earthquake, and what he predicted would happen. Ricky agreed that the best thing to do was to shelter in place, and ride out the volcanoes. Before they went to bed, Bret showed Ricky the rest of the complex. He was seriously impressed by the steam powered generator and all the wood, propane, diesel, and gasoline they had stored.

"It looks like you guys are set to stay indoors for 10 years if necessary. What are you planning on doing afterward?"

"As you've already seen, the younger couples have new infants, and until Mammoth Mountain blew her top, they were homesteading abandoned houses and ranches further up the fire road. There's several other houses we haven't investigated so far, and a couple that are along the Angeles Crest Highway. If they survive the ash fall, and you guys decide to stay here, you can either take over another house as a group, of if you want to raise families, each couple could have their own house. We've significant resources we can share to help you get started, but we got most of this by scavenging, and we'll probably continue scavenging after the ash stops falling."

"Your son Allen and his wife seem awfully young?"

"Young by pre-Big One Standards, but by 1800's standards any single woman over 18 would be an old maid. You've got to think we're back in the 1800's because as soon as the gas and diesel run out, we're back to the 1800's. Horse or oxen power to farm, heavy manual labor, childbirth without benefit of any medical help, etc. A lot of people will die much younger than they would have before the Big One."

"Ok, then why haven't Jeremy and Natalie gotten married?"

"They will in a few years. Jeremy's still thinking like a teenager, and isn't ready for the responsibility. Allen on the other hand jumped right into an adult role when the stuff hit the fan. You and Diana seem to be a cute couple."

"We've been close ever since we joined the Explorers in High School."

"I'd appreciate it if you two could avoid becoming parents until we could set you up with a house, as you can see, we're kind of crowded here."

"No problem Bret. Hopefully in 6 months we'll be able to find a nearby house to homestead. By the way - thanks for taking us in - I realize the risk you're taking by adding 8 extra mouths."

"We've got plenty of food and water, it's supplies we're short of. Go easy on the TP and other paper products, and recycle anything you can until it wears out."

"How'd you get all these supplies?"

"Some might call it looting, but I prefer Scavenging. Odds are the owners of the stores we picked over died in the quake, and if they didn't, and are around to collect after this is all over, I'll make arrangements to pay them back. The rest of the stuff we got from nearby ranches."

"How'd you get in the front door?"

"I've got an electric lock pick I bought for my auto repair shop. Customers and mechanics are always locking their keys in the car, and it's cheaper than 2 calls to a locksmith."

"I know what you mean - Before I was an Explorer Scout, I lived in East LA, and several friends of mine showed me how to break into cars and open locked doors. That's how we got into the shelter you found us in - I picked the front door lock with 2 paper clips."

"When we've got some spare time, you might teach the rest of us how to do that - lockpicking would be a vital tool in the near future. We need to scavenge anything we can from abandoned houses in the area that we haven't hit already, and if everyone can open their own doors, we can form smaller teams and search more houses. We've got radios to keep in touch, so if anyone needs help, all they need to do is call."

"Sounds like a plan Bret - we'll have tons of time on our hands, even with doing what chores we can do while the ash is still falling. That reminds me - the guy who owned that ranch left a bunch of FM's and stuff you might be interested in. Stuff like patrolling, and shooting."

"That could come in handy, and might help Leroy teach the rest of us civilians how to safely move in hostile territory. Eventually we're going to bump into some more survivors, and they might not be the friendly type. Any other skills that might come in handy?"

"Mark and I are pretty good deer hunters. His dad used to take us deer hunting every year, and we shot monthly at the local range. Mark's dad had a Remington 7mm Magnum just like the one we found in the shelter, and either one of us could kill a deer with 1 shot out to 300-400 yards. My best long-range group from the prone position with the bipod down was an 8-inch 5-shot group at 600 yards using Mark's dad's gun. Shooting Military Prone, I can shoot a 10-inch group at the same range. Mark's a better shot than I am."

"Ok, that makes you two the designated snipers. None of us can hit the broad side of a barn outside 300 yards, even with a scope! Once the ash stops falling, we'll take you to our range, it's kind of primitive, but we've got over 600 yards cleared downrange, and it backstops into a mountain."

"Sounds like fun - none of the girls really know how to shoot, and I think Diana might be afraid

of guns."

"I know how to fix that - Jim's wife Gloria was a total Sheeple when they joined us, and was totally anti-gun. Between Leroy and I, we scared the crap out of her, and then taught her how to shoot."

"Scoutmaster Andrews already scared the crap out of the girls - so I guess the next step is to teach them how to shoot?"

Bret laughed his head off, and told Ricky as soon as the ash stopped falling, they'd get the girls up to speed.

Somewhere West of Grass Valley, CA

Larry woke up, and his ribs didn't hurt so bad. He wondered how long he had been out, and looked around for Melissa. She wasn't inside the tent, so he called her name. She came running in and said "What's wrong dear?"

"Sorry, I just woke up and you weren't here - how long was I out?"

"It's been a week since the flood, and I haven't seen anyone. I decided to make camp here. I had the darndest time trying to get the tent up by myself, but finally I got it. I've been supplementing our diet with the fish I've caught with your mini fishing kit. The kids are doing OK, and when I'm not exhausted, I've been scared to death."

"Why - what happened?"

"Nothing happened, once I got you inside the tent and back on the air mattress, you fell asleep and didn't wake up for several days. I was able to keep you hydrated, and got you to pee into a plastic bottle that drifted up on the shore. You're probably really hungry right now, all you've had to eat and drink for a week was Gatorade that I mixed 50% strength to stretch it out. Every time you woke up, I gave you a glass of Gatorade and 1000mg of Advil. Near as I can tell, we're about 20 miles west of our house alongside the river. I haven't explored much because I didn't want to leave you alone. If you're able to stand up, and use a map and compass, you might do a better job of triangulating our position."

Larry realized he wasn't wearing his fanny pack, and panicked until he realized Melissa was wearing it. He was glad to see his Glock was still in its holster, and the spare mag was still there. Melissa saw her husband staring at the Glock, and told him "When I pulled you out of the water and laid you on the air mattress, I took the fanny pack off you so you could rest comfortably."

Larry was glad he had packed the Kel-Tec SUB-2000 in the pack along with 4 9mm GLOCK 17 high capacity mags and 100 rounds of ammo. The gun folded into a small space, and Melissa could easily handle the recoil of the small carbine easier than she could handle the much stouter recoil of the Kel-Tec SU-16 that weighed less than 5 pounds and fired the .223 round. He wished Kel-Tec made a .45 caliber version of the SUB-2000, but they never got around to it. Melissa helped Larry to his feet, and once they were outside the tent, helped him put on his fanny pack. Larry took the Kel-Tec out of the bag and handed it to Melissa, who unfolded it, and loaded a G-17 mag under Larry's watchful gaze. She did it like she could do it blindfolded, basically because Larry made her practice manipulating the rifle with an empty magazine blindfolded until she could do it quickly enough to satisfy him. She now realized that Larry wasn't being hard on her - he was teaching her to do something quickly that might save her life and now the lives of her family. She clipped the sling they had purchased for the gun onto the frame, and slipped it over her shoulder, then took out her fanny pack and put it on. Her fanny pack was identical to Larry's except there wasn't a pistol on it, and the knife was a KABAR instead of a Kukhri that rode on Larry's belt.

She called the kids to their side, and she had to warn them to be gentle with daddy - he was still sore. She got out the map and compass, and Larry confirmed her suspicions that they were about 20 miles west of the house. Precision bearings were difficult with the baseplate style compass Larry had included in their fanny pack kits. If they survived this, he'd include a lensatic compass in the next kits. Larry felt tired, and Melissa helped him sit on a log next to the fire. He was glad they were over 200 miles northwest of Mammoth Mountain, and weren't getting much ash. He was amazed that the entire Sierra snow pack could melt like that, then he guessed that the hot gasses and ash must have traveled north and south along the Sierra due to some freak weather condition. Either way, his home and everything in it was destroyed, and he had to survive with what they had on them until they found help, or help found them. He knew the authorities would be checking the river soon, if they could, for dead bodies, and their best chance of getting found would be to stay along the river.

Chapter 25

*** Somewhere near Grass Valley, CA 2 weeks later***

Larry awoke to the sound of a motorboat, told Melissa and the kids to stay in the tent, and he'd check out the motorboat. He told Melissa to keep her carbine handy, and if he started shooting, to kill everyone in the boat. Melissa started shaking with fear, and Larry told her "steady lady - I need you to cover my back. Odds are these people are with Search and Rescue, not FEMA. They're too busy pacifying the cities and herding the sheeple into the pens."

Melissa gave Larry a desperate hug and a kiss, then he was out the door of the tent, waving his arms. "Over here!" The boat turned and headed toward shore right where Larry stood. He could clearly see the deputy's uniform, so he relaxed. FEMA would be wearing their blue and gold windbreakers. As the boat grounded, the deputy recognized Larry.

"Larry, you're alive - How did you survive?"

"Ronnie, it was a wild ride in our River Raft, but Melissa, the kids and I all survived."

"How are you doing?"

"We're living on fish and getting low on supplies."

"Well, I COULD take you to the FEMA camp downstream where they'll feed you 1 MRE per day, or you could stay here."

"Could you tow my raft about 10 miles up stream, I've got some stuff buried that if I can find it will make it much more livable around here."

"Sure, we've got to go upstream anyway."

"I'll be right back - wait here."

Larry ran back to the tent, told Melissa what he wanted to do, grabbed his PFD, and the folding shovel, kissed Melissa and the kids, and said he'd be back some time tomorrow. He ran back out, and Ronnie had secured his raft to the RHIB with a 50-foot line, and Larry climbed aboard his raft, and floated it out into the stream with his paddle. The RHIB backed off the shore and took Larry under tow. As they rounded a bend in the river, Larry could see for himself the damage the massive flash flood had done. It looked like pictures of Mt. St. Helens, what trees were left were all down, all the houses that used to be riverfront property were washed off their foundations. Larry wondered how he was going to find his house, when a familiar piece of

topography told him where he was. The footings for the bridge that crossed the river were still there, but the bridge was washed away. Larry knew his house was 1/4 mile East of the bridge, and evidently Ronnie did too, because the RHIB turned into the shore right where Larry's house used to be. Larry paddled for the shore, and beached his raft next to Ronnie's Search and Rescue RHIB. He shook Ronnie's hand, and Ronnie said he'd be down the river in a week to check up on them if he could. Larry choked up, and told Ronnie thanks, and then Ronnie backed his boat back into the river to search for more survivors, or clear out dead bodies.

Larry picked up the nose of the raft, dragged it all the way onto the beach, and hid it behind some large pieces of driftwood, then went to find his caches. He knew the sealed Conex box was watertight, and the 5-gallon buckets should be fine if they weren't washed away. It took a while to get through the mud and debris, but eventually he located the northernmost corner of the foundation of his house, turned Northeast based on his compass, and started counting paces. When he got to 43, he stopped, knelt down, said a quick prayer while he was down there, and started digging. I foot down, he hit something solid, and knew his 5-gallon paint bucket cache was still where he left it. He carefully cleared the dirt and mud off the lid, then opened it and took out the contents and laid them on his foundation. He did this 6 more times at different bearings and distances from opposite corners of the foundation, and retrieved 6 more 5-gallon pails full of survival gear. He was tired, but still needed to dig up the Conex box to get the stuff they really needed.

He headed West from the Southwest corner of his foundation 74 paces, and started digging again. He thanked God the soil was just starting to dry out from the flood, or it would be difficult to impossible to dig in the heavy clay soil which resembled concrete in the summer. It took him until dark to finally get to the conex box's lid, so he went back to the foundation, took out a Mylar sleeping bag, a bivy tent, and a sleeping pad, and went to sleep on the foundation. The next morning, he packed the stuff back up, set a small fire on the foundation to heat water for coffee, and ate an Energy bar while the water heated. The sleep, coffee and energy bar got him feeling good enough to tackle the conex box. It took another hour of heavy digging to unearth the 2x2 lid, un-dog the catches, and swing the heavy lid up to open the conex box. He was very happy to discover that everything was just as he left it. Several hours later, he emptied the conex box, assembled the wheeled game carrier, and started hauling everything down to the river to put in the raft. He realized the raft wouldn't be easy to get off the beach with a full load, so he parked the stuff next to the raft, and went back for several more trips. Finally, at 3:00 that afternoon, he got the raft into the river, tied if off with a good strong rope to a large tree trunk, and started loading it. When he finished, the raft was riding low, but not dangerously so even with his weight added to it.

Finally when everything was loaded, he realized he couldn't detach the rope from the tree without risking losing the raft, so he untied the rope from the raft after he was seated inside the raft, then maneuvered carefully to the center of the raft to paddle downstream. Right before dark, he saw his tent, and paddled like mad toward shore, barely making it. Melissa ran out to

help him beach the raft loaded with stuff. She was amazed at how much stuff he got in the raft.

"Larry, if you got all this in the raft, why didn't you get in the raft when we were trying to survive the flood."

"The water's calm now, and I could risk floating down overloaded, but if we were this overloaded when the flood hit, the boat would have swamped, and we all would have drowned. Ronnie said he'd be back in a week to check up on us. Can you help me unload all this - I'm about ready to drop."

"Do we need anything right now? Otherwise we can beach the raft and unload it tomorrow after breakfast."

"Not really - I like your idea better." Larry hopped out of the raft, and between the two of them they got it beached high and dry. Melissa had a couple of fish they caught, and some rice and seasoning mix in a pot on the fire when Larry walked up. He hugged his kids first, then sat down to eat.

"I was hoping you'd make it back tonight so I saved you some dinner."

Larry held his wife, who started sobbing uncontrollably. After dinner, they all slept in the tent.

The next morning, they started unpacking the raft. Larry told Melissa that the 5-gallon buckets contained foodstuffs, vitamins, and various medicines. She was amazed at how much stuff he'd managed to pack into 7 5-gallon buckets. He'd double-bagged, and vacuum-sealed in Mylar bags all the food stuffs, including 50 pounds of rice, 50 pounds of beans, 25 pounds of add-water-only pancake mix, 25 pounds of oatmeal, 10 pounds of dehydrated scrambled egg mix, a bag full of salt, pepper, and other seasonings, 1 gallon of vegetable oil, 3 bottles of multivitamin tablets, 2 500-count bottles of Advil, and 1 500-count bottle of children's aspirin, and 1 bag full of first aid supplies including bandages, gauze, ace wraps, bandanas, miscellaneous medicines, etc.

The conex box contained a set of frontier tools including a shovel, pickaxe, hoe, mattock, large bow saw with 12 blades, a 2-ton come-along, a large single bit axe and hatchet, sharpening kit for the axe and hatchet, a complete set of cast iron cookware, plates, cups, and silverware, a heavy-duty fire-ring grill stand for cooking over an open fire, a tripod and ring setup for cooking with the cast iron pots, several bags of clothes for everyone including heavy winter clothes, a 12-gauge pump shotgun with 200 rounds of buckshot, 200 rounds of birdshot, and 20 slugs, a Remington 7mm Magnum with a Redfield 3x12x50 scope and 500 rounds of .308 JHP hunting ammo, and 2 semiauto SKS carbines with a case of 7.62x39 ammo. They each had a LBV with pockets for the SKS ammo, but no vests - Larry wasn't rich enough to afford the Level IIa vests he wanted, and spent his money on basic survival supplies, getting the most for

his small amount of money as he could. He drooled over the H&K G3's but there was no way he could afford them on his teacher's salary.

He made sure that a spare copy of several essential books was placed in the connex, and double-bagged with desiccants to make sure they survived. They included Carla Emery's Encyclopedia of Country Living, Where there is No Doctor, SAS Survival Guide, SF Medics Handbook, a New King James Bible, The Anarchist's Cookbook, Unintended Consequences, a small pamphlet copy of the Constitution and Bill of Rights that was distributed by the NRA during one of their more successful membership drives, and The North American Guide to Edible Plants. A small strong-box included 5 1oz Canadian Maple Leafs, and 50 US Silver Eagles. There were 4 backpacks and 4 daybags with Camelback inserts in the box as well, and 2 Katadyn Voyager water purifiers with spare filters. Larry hoped his family could survive long enough for California to get back on it's feet, otherwise, he'd have to start looking for some land to homestead and plant that #10 can of non-hybrid seeds he packed in the kit. He wasn't looking forward to building a log cabin either.

*** That same day near Roseburg, OR ***

"Paul, wake up, I think the ash has stopped falling."

"I'll need your help to get it off the roof. If it gets wet, it can collapse the roof. Put on a poncho, N -95 mask, and goggles just to be safe. Can you bring my climbing gear, and I'll bring the extension ladder and the grain shovel." Jodi asked Nicole and Robbie to watch the kids in the play room, said they were going to be outside for a while, and gave Robbie a FRS/GMRS radio to contact them in case of an emergency. She locked the shelter door, pocketed the keys, and followed Paul out to the roof of the house. He explained to her that with only 1 person to belay him, he'd have to do 1 side of the roof at a time, and her job was to sit on the ground and act as an anchor to keep him from sliding off the roof. Paul had already shown Jodi basic mountaineering techniques during their camping trips before they started having kids. Paul put on his climbing gear including his body harness and helmet, and threw the rope over the roof. Jodi caught it, backed up twice the distance as the height of the roof, and sat down with the rope looped around her waist. She knew that 1 tug was tension, and 3 tugs was slack. He also had a radio for detailed instructions. Jodi took advantage of the quiet time to pray and meditate. Suddenly she felt 3 tugs, and realized she'd been daydreaming, and paid out some rope. 4 hours later, Paul called and said he was done with that side, and they needed to switch sides. He climbed down the ladder, walked around, took the hose and hosed himself off. Paul was covered in ash, and looked like a grey Snow Monster. Once he'd washed all the ash off, he put on a fresh filter, reset the ladder, threw the rope over the other side, and started all over again. Jodi was seriously concerned by the huge pile of ash Paul had pushed off the roof. Even as far away as they were, there must have been 6-12 inches of ash on their roof. She was walking in calf-deep ash, so she knew that figure was about right. She was glad that Paul had told her to sit on a piece of heavy canvas tarp to keep the gritty ash off her

backside. She laughed, thinking that if Paul was so solicitous about her comfort, he would have backed the tractor out and used it as an anchor, then she realized 1) Paul needed her company 2) It used precious gas to move the tractor 3) She didn't require gasoline to move, and was heavy enough to safely belay her husband - talk about putting your life in your wife's hands!

When he finished, Paul cleaned off their solar panels and climbed back down off the roof. He hosed off again, and despite the fact he was soaked to the skin and ice cold, Jodi gave her husband a big hug and kiss, then helped him carry the stuff back to the pole barn. The pole barn was covered with ash too - but the roof was 5 times stronger than the house's. Jodi hoped the stores would open soon, they were getting low on food. Paul tried to explain to her that most of the food was already gone, and unless they felt like looting/scavenging, there wasn't much food available. Paul was mad at himself when he realized that he could have bought a Nitro-pak 4-person 1-year food supply for about 2/3 of what they spent each year on food. They didn't have much in the way of firepower either, just his Remington 7mm Magnum hunting rifle, a SKS, Mossberg 12-gauge home-defense shotgun, 2 Ruger 10/22's and 2 used Glock-19's with night sights and 4 high-cap mags each he got cheap when the Police Department went to the S&W .40. Paul couldn't understand why the PD would spend that kind of money switching the entire dept. to a marginally better caliber, when most of the officers he knew weren't that good of shots anyways, and only shot to qualify every 6 months. Paul thought their loss was his gain, and the dealer sold him 2 used Glocks cheap. He wanted .45acp pistols, but couldn't pass the Glocks up - The dealer was selling them for \$250 each with 4 15-round mags each. He bought 2 Kydex IWB holsters and 8 single mag carriers, and 2 SAS thigh holsters while he was at it, so the dealer gave him a package deal, saving him a bundle of cash.

Paul wasn't happy about his ammo storage either - the volcano eruptions caught him by surprise. He had 2 bricks of CCI Mini mags, 100 rounds of 7mm JHP ammo, and 500 rounds of 7.62x39 ammo (what was left over from a case he bought several years ago from Ammoman.) He had 500 rounds of 9mm 115gr Winchester Silvertips, and 500 rounds of Winchester 115gr fmj White Box practice ammo, way less than he had planned on having if TSHTF. One thing he was glad about was they had just finished the inside of their basement shelter, and stocking everything in earthquake-resistant shelving. He'd upgraded to a 500-gallon propane tank, and kept it full. He had a couple of 5-gallon cans of gas plus whatever was in the vehicles, so they'd soon be walking if they went anywhere. When they got back in the shelter Paul confronted Jodi "We were caught flat-footed by this disaster. We're way short on supplies including gas, food, and paper products. We can't survive here much longer without more supplies. I'm sure there's tons of abandoned property in Roseburg we could use to survive with - but you need to realize some people might call it looting or stealing - I like to think of it as re-allocating resources."

"How about "Thou Shalt Not Steal"?"

"I'm not taking stuff from people at the point of a gun, I'm picking up abandoned property that would otherwise go to waste."

"What about the grocery stores, etc."

"If the owners are no where to be found, then at the worst I'm looting. Since we're using the stuff to survive, instead of just taking luxuries, it falls into a grey area."

"On top of everything - what you're suggesting is dangerous! We could all get killed by a disgruntled shop owner, or another looter!"

"If we don't stock up, we'll eventually starve. All I've got is 1 #10 can of non-hybrid seeds. We've no grains, starches, or protein. I don't think even a Vegan could survive on a diet of just vegetables without grains, starches or proteins."

"Ok, Paul - you win. When do you want to go?"

"I need your help Jodi - it will take too long by myself, and I need you to watch my back."

"What about the kids?"

"They're old enough to care for themselves for a couple of hours. It's too much of a risk to bring them with us. This way, if something happens to us, they at least have a chance to survive."

Jodi realized Paul was right - she still didn't like it. Things used to be so easy before the Big One, now just surviving was tough and dangerous. "Ok, make a list, and we'll go shopping first thing tomorrow."

*** Later that same day near Winnemucca, NV ***

Once the ash stopped falling Herbert wanted to go out and check on the herd. He knew most of them would be dead, but he might find some survivors. Martha insisted he drive their 6x6 Polaris Ranger, take his oxygen bottle, and wear his N -100 mask and goggles while he was out. She handed him a portable radio, and told him to stay in touch. He walked out to the barn, opened the cab door of the ATV, set the small oxygen bottle on the floor, zipped the cab back up again, and backed out of the barn. It was dark enough that he needed the running lights, so he switched them on. He drove to where he left the herd, and was devastated by the sight of the entire herd down and not moving. He almost turned around and left when he heard the faint cry of a calf. He shut down the ATV, and heard the calf's cry. He grabbed the radio "Martha, I think we've got a live calf in the herd - the rest of them are all dead."

"Be careful dear."

"I'll call you when I get back inside the cab." Herbert unzipped the clear plastic cover he had purchased as an accessory, and stepped out onto what appeared to him like the surface of the Moon. He stood still and listened, then located the general direction of the calf, and prayed that the calf would keep crying until he located it. He stepped gingerly around the dead bodies of the cows, and finally located the bawling calf. He slipped a halter and rope over the head of the calf and lead it back to the ATV. Thinking quickly, he picked the calf up, and laid it into the bed of the ATV, and tied its legs together before he could struggle too much. He took some more rope and secured the calf to the bed, put a clean gunny sack over it's head both to filter the air, and keep the calf calm until he got back to the barn. He drove back to the barn as quickly as he safely could with the calf in back, stopped and backed in. He hoped his cow Bessie would take another orphan. She'd just given birth a couple of months ago, and had enough milk for two calves. Herbert climbed out of the cab, walked over to Bessie, saw that her calf was done nursing, and decided to untie the calf and set it down. No sooner had it regained it's feet, then it scrambled over to the cow and started nursing. Herbert rejoiced when he saw Bessie let the strange calf nurse, not many cows would tolerate another calf when they already had a calf.

Seeing the calf was in good hands, he called Martha and said he was headed back out to bring a steer inside and butcher it. He hooked up a lowboy trailer to the back, and drove back out to where the herd lay. He selected a smaller steer since it was easier to handle, and used the winch to haul it aboard the lowboy. With the steer securely on the trailer, he slowly made his way to his butcher shop. He backed the trailer under his chain hoist and gantry, connected a heavy gambrel to the steer's hind legs, and hauled the steer so it's body was suspended in the air over the blood drain, then slit it's throat and let it bleed. Once it bled out, he put a clean pan underneath the steer's body and proceeded to skin and gut the animal. When he finished, he cut the head off, then picked up an electric chain saw and cut the body in half by splitting the spine. He washed the carcass before he proceeded to make sure he got everything that could contaminate the meat off the carcass.

Once he had the steer in 2 pieces, he removed the forelegs, and set them aside. Next he removed the loins and ribs and set them aside. Finally all that was left was the hindquarters of the animal, and he sectioned it while it was hanging and put the sections onto clean butcher paper. When he finished the first half of the steer, he pulled the other half over using the trolley and sectioned the carcass. With that out of the way, he fired up his meat saw, and cut the sections into steaks, roasts, ribs, and chops. He had a whole roll of butcher paper and tape, and as he wrapped the cuts, he wrote what the cut was, it's weight, and today's date, then stuck the cuts into trays, and stuck the trays into his huge commercial freezer. When he was finished, he cleaned everything up, went in the other room, took off his bloody clothes, and used the shower he built just for that purpose. Martha hated the way Herbert smelled after he butchered a cow, so he installed a shower next to his butcher shop, and always had a clean set of

underwear and coveralls handy. When he was all cleaned up, he took a piece of Prime Rib Roast out of the freezer, and brought it into the house so Martha could cook it for dinner. They always celebrated the butchering of a cow by eating the prime rib roast for dinner with all the trimmings. During grace, Herbert made sure to thank the steer by name.

Chapter 26

*** The Next Morning Near Roseburg, OR ***

Jodi was dreading getting up this morning, still she had promised Paul she would help. She was afraid to leave her children home alone, yet she was more afraid they'd get killed while they were out scavenging. She'd spent the night in prayer, and put them in God's hands. After breakfast was over, she could delay the inevitable no longer. "Ok, Paul, let's get this over with!"

"You sound like you're facing a firing squad."

"We're doing something I'm not really happy about. I understand why you want to do it, but I can just see us getting blown away by a disgruntled shop owner, or some other gangs of looters."

"First of all, we're not looting, we're scavenging. Secondly, if we don't scavenge, our chances long-term survival are virtually zero. This caught me totally flat-footed. We don't have enough food in the house to last more than 3 months, we've got no supplies except a 12-pack of toilet paper, and from what I've been hearing on the radio, the government is in no position to help."

"Ok dear, let's get in the truck."

Jodi kissed her kids goodbye, hoping she'd see them again. She knew she couldn't cry, or they would be freaking out until she came back. She set them in the living room to watch TV, and they walked out the door, locking it behind them. Paul transferred all the gasoline they had in cans to the truck, and was ready to go. Their first stop was at U-haul store to "borrow" the largest trailer Paul's truck could haul. Paul told Jodi he'd return it as soon as they were finished with it. He cut the lock on the gate, hooked the trailer to his hitch, and drove to their first stop, a food warehouse/wholesaler company on Park Street. They carefully checked around, and the place was abandoned, and the doors locked. Paul thought to himself, "Moment of truth" then cut the lock and rolled up the roll-up door. There was no power on, so he wasn't worried about the alarm. He backed their trailer up to the lowest loading dock, and started pulling pallets with a pallet jack over to the U-haul. When he saw that he could only get 3 pallets into the trailer, he decided to take a couple of cases of everything they needed right now, then come back later for the rest. He threw in 5 cases of TP, Jodi added a case of her brand of pads, and several boxes of soap, cleaners, and other stuff they were short of. Paul added a 2 cases of bagged rice and dry pinto beans, a case of Tabasco Sauce, 2 cases of SPAM, Macaroni and Cheese mix for the kids, instant mashed potatoes, whole wheat flour, sugar, salt, pepper, yeast, cooking oil, 3 cases of 1lb canned ham, 2 cases of tuna, pasta, tomato sauce,

cheese, and lunch meat. He skipped the cigarettes and booze, then he spotted a section of "survival foods" that where dehydrated and stored in #10 cans. He filled up the trailer with as much of them as he could, then told Jodi they'd have to unload and come back for the rest. They were home in half an hour, and quickly unloaded. They turned around, and drove back to the warehouse, loaded the rest of the survival food, and anything else they had room for, including more TP, soap, and cleaning products. Once they made it safely home, they packed everything in their basement storage area. Paul inventoried their haul, and realized they could now at least eat, wash their clothes, and go to the bathroom for the next year without any further supplies. Now what he needed was canning supplies, gasoline, some way to store it, some garden implements, and hopefully some more ammo and guns. He'd hunted deer in the woods around Roseburg before, and knew that he could harvest a couple of deer each year to supplement their food supply if they could locate a canner and a bunch of quart-size jars and lids. Paul asked Jodi if she knew where they could buy a 12-quart canner and a bunch of cans. She said that her friend Linda right down the street was really into canning. She was worried because they hadn't heard anything from her since the Big One, and they talked almost every day. Her husband's company temporarily transferred them to Mt. Hood Oregon to help open a new store, so they commuted back and forth on weekends. She was alarmed because Mt. Hood was one of the volcanoes that were supposed to have exploded. They walked to her house, pulled the front door key out from under the key rock, opened the front door, and saw the message light blinking on their answering machine.

She pressed the button, and heard her friend Linda's voice. "Jodi, This is Linda. We're trying to make it home from Mt. Hood. It doesn't look good - the freeway is packed, and we can't get off. If you get this message and we're not home a week later, help yourself to anything in the house. Dennis left a list of stuff in an envelope in the cupboard over the fridge. OH MY GOD! DENNIS FLOOR IT! THERE'S A BIG CLOUD HEADED THIS WAY!" Jodi heard her friend's dying scream, then a dial tone. She turned to Paul and cried, knowing she'd never see Linda again, at least until they were reunited in Heaven. When she finished crying, she located the letter, which read

To Whom it May Concern:

Here's a list of stored supplies in caches I've buried. If you're reading this list, I'm with Jesus, so feel free to use anything you want to survive. Make sure you check the basement first, we should have a bunch of stuff there.

God Bless,

Dennis

a set of keys fell out of the envelope after Jodi sat down to read it.

*** Near Grass Valley, CA 1 week later ***

Larry was fishing near their campsite when he heard a motor on the river. He almost freaked out when he remembered that Ronnie said he'd be back in a week to check up on them. As the boat got closer, it was Ronnie's RHIB, and he was wearing a deputies uniform. When he got 10 feet from the shore, he threw Larry a line, and he secured it to a large driftwood tree and helped Ronnie beach the boat.

"How you guys doing?"

"Starting to loathe the taste of fish - why?"

"I got good news and bad news - OK if I talk to everyone at once?"

"Sure, come on over next to the campfire, I'll get Melissa."

2 minutes later, Ronnie was sipping a mug of hot coffee and telling them what he had heard.

"Larry, let me give it to you straight - we're on our own. FEMA can't help, and the National Guard is too busy trying to straighten up and clean up the big cities. There's no food available, what little we have is going to the camps for survivors. I've located a supply of non-hybrid seeds and I can give you enough to get started. I'd highly recommend moving back to your old house and rebuilding there. Any land around you - feel free to take anything you need, none of your neighbors survived. I know a couple were into survival, so if their basements are intact, you might be able to salvage some usable stuff. If you want to go back to your house, I can take Melissa and the kids right now and come back for you, or we can do the whole thing tomorrow.

Larry looked at Melissa and said "He's right - we stand a better chance of surviving at our old house - at least we've got a cleared lot we can farm, even if it's by hand. As we chop down the trees for fuel, we'll clear even more land. Also we might find some useable stuff that survived the flood."

"Ok Dear, you know what's best. I'm getting tired of camping anyway. Let's go home."

"We'll be living in a tent for a long time Melissa - All the houses were washed off their foundations by the flood. It's like those pictures of Mt. St. Helens upstream from here. Everything's changed, nothing will be easy from here on out."

Melissa looked around at their surroundings, imagining having to chop down the trees around

her to grow food to eat, and decided that even if her home was gone, there were advantages to living on their old lot. She got up and said "OK, let's get packing."

Ronnie helped them collapse and fold the tent. They put the bulk of their supplies in the raft with Larry, and the rest of their stuff in the RHIB with Melissa and the kids. When they were done packing, they all put on their PFD's and got in their respective boats. Larry had to ride in the raft so they could steer it around obstacles and beach it when they got home. Ronnie's RHIB belonged to the County Sheriff's Department and was used by their Search and Rescue teams so it was over 20 feet long and was powered by a 125hp Honda Outboard motor. When everyone was aboard, they still had room to spare. Melissa sat the kids near the center of the boat on the floorboards, and she sat towards the back keeping an eye on Larry. Larry shoved off first, then they got the RHIB in the water. As Ronnie accelerated upriver, Larry's raft turned upriver and followed 50 feet behind, just like last time. Ronnie had been up and down this river so much in the last couple of weeks, he was easily able to avoid any snags or obstructions. An hour later, they arrived at their property, and Ronnie beached the RHIB while Larry paddled the rest of the way in. Melissa helped him beach the raft, then they unloaded the RHIB because Ronnie had to get back to work. Larry shook Ronnie's hand, and said they'd keep in touch. Ronnie untied the line between their rafts, shoved off, and quickly disappeared upriver.

*** The Next Morning, Bret's House - Angeles National Forest ***

Kelly made breakfast for everyone in their shelter, and when breakfast was ready, she announced "Breakfast's ready - get it while it's hot!"

This morning, breakfast was hot oatmeal with raisins, brown sugar and cinnamon, and black coffee or tea for the resident caffeine addicts. Once breakfast was finished, they started their chores. Everyone cleaned their rooms, put their laundry in their laundry bags, and went out to do their chores. Allen and Ricky went to check on the horses, while Natalie, Jeremy and Veronica checked on the chickens and pigs, and collected the eggs that were laid overnight, saving some to hatch. Jeremy went through the worm farm with a device Brad built to dig the worms out quickly without hurting them. Jeremy took the dead worm bodies and put them in a cup to feed the fish, then picked the worms out of the oldest tray, put them in a bucket, and gave them to Natalie to feed the chickens. Every time she showed up with the worm bucket, she was mobbed by chickens. She learned to quickly spread the worms out in a shallow metal trough and back out before she got stampeded by chickens. When he finished, Jeremy took the dead worms over to the Tilapia pond, and left them for the people who where maintaining the fish.

Others were feeding the firebox of the steam-powered generator, and several people were working in the hydroponic "garden" either planting or harvesting plants. With the artificial light and hydroponic media, the plants grew faster and larger than normal. The discharge from

the fish ponds was very nutrient rich, and the plants quickly absorbed the nutrients and sunlight, and the plants grew quickly. The only crops they didn't grow were corn and wheat because they took a lot of room for a small production. They grew carrots, beets, squash, tomatoes, peppers, onions, potatoes, celery, lettuce, melons, and various herbs. What they didn't eat fresh was canned and stored.

One of their favorite meals once the potatoes started to mature was the Friday Fish Fry where they ate battered and fried Tilapia fillets and "Freedom Fries". With the additional people, they weren't able to freeze any Tilapia, but they were able to feed everyone without hitting their stored food too hard. Breakfast was usually either oatmeal or fresh eggs when they had enough, or dehydrated when they didn't, and when they had leftover vegetables, Bret liked to make veggie omelets for the entire crew as a treat. Dinner was usually soup, stew, chilli, or something that would feed a large crowd without too much work.

Veronica, Gloria, and Kelly nursed their babies several times a day when they weren't busy working. Their babies were getting bigger, which resulted in more stinky diapers. Brad, Allen, and Jim washed their share of the dirty diapers, and Allen said he'd rather clean out the stables than wash diapers. The three of them decided they wanted to wait a while before they had any more kids. Diana and the rest of the female Explorer Scouts were always asking Veronica what it was like to be a mother. "I'll tell you one thing, Labor and delivery without drugs is everything it's cracked up to be. Passing your baby's head down the birth canal is like trying to squeeze a large orange down a garden hose. I never worked so hard or hurt so bad in my life, but seeing my baby's face made it all worth it." Hearing Veronica's graphic description of child birth made them less anxious to get married and have kids of their own. Besides, Ricky told Diana they had to wait until the ash stopped falling so they could get a house of their own before they could get married.

Bret was checking the supplies, and was glad that they were going through propane more slowly than he thought they would. On the other hand, they were going through wood like crazy. They had already burned off 1/8 of their wood pile, and he had planned the wood pile to last 5 years. He hoped the propane tanks at the depot would be intact after the ash stopped falling. He decided as soon as they could to mount a snowplow blade on the deuce and a half, and have it escort the propane truck to the tanks and fill it up again. He made a notation to burn more propane and less wood for a while. They still needed to figure out a happy medium between burning wood and propane.

The next morning, Bret decided that the ash fall had slowed enough to go get some more propane, some more diesel vehicles if they could locate them, and some more diesel fuel. He asked for volunteers, and Jim, Brad, and Allen volunteered in a heartbeat, realizing it might get them out of washing stinky diapers. Bret told them Bear should come along and show them how to operate the propane equipment. They fit the snowplow blade to the deuce and a half, started the huge diesel, and drove out the garage door. Bear and Brad drove the propane tanker

behind them after Bear had emptied the tanker into all the available propane tanks. Jim and Allen took turns driving the deuce and a half and spotting the edge of the road. Finally they realized the ash wasn't deep enough to impede the progress of the tanker, and lifted the blade so they could go much faster. They reached the propane delivery yard an hour or so later, opened the gate, cleaned the ash off the equipment while Bear started hooking up the equipment. He showed everyone how to do it, turned a key, flipped some switches, and the delivery tank started filling quickly. With 2 spare drivers, they decided to take all the diesel trucks in the yard, and the flatbed trailers, backhoe and any other useable equipment. Jim won the coin toss, and got to drive the much more comfortable propane company utility truck back, and Brad drove the other one. When they got back, the garage was crowded, but not dangerously so. Bret would be glad when this was all over, and he had some room to breathe. Except now he had to find 4 additional homes that would be suitable to homestead. Allen was right, the 8 Explorers were turning out to be a real asset. Also, if they had kids, that would be 8 fertile couples to replace the population as he and Maggie grew older. Leroy didn't seem to be interested in getting married again, and after he heard his horror stories of how his ex-wife treated him, he couldn't really blame him.

Chapter 27

*** Later that afternoon near Roseburg, OR ***

After Jodi was done crying, she walked into Linda's bedroom, removed their photo albums and other stuff she wanted while Paul walked over to their house and brought the truck and trailer. He drove back over, then instead of going through the house, sat down and talked with his wife.

"I really miss them too. I can't believe they're gone. Dennis and I were just talking about going hunting this fall - we got our deer tags again. Jodi, I don't know if you can answer this right now, but I need your help."

Jodi looked up into Paul's face and slowly smiled.

"We need to go through their house, and inventory everything. From what Dennis told me, they're way better prepared than we are. They've got solar panels and wind turbines, and a 10KW inverter system with a huge battery back up. Their whole house runs on propane, and he's got a 5,000 gallon propane tank buried out back in a concrete block enclosure the county made him install to get a permit for a tank that big in a residential area. If I know Dennis, he probably has the tank full of propane. Even his backup 5kw generator runs on propane. Instead of moving their stuff to our place, I'd like to move our stuff to their house."

"I'd feel funny sleeping in Linda and Dennis' bed."

"Me too - we can move our bed into their bedroom."

"Let's pray about this and sleep on it, ok Paul - I'm still in shock over hearing Linda die."

Paul held Jodi, and they started praying together silently. When they finished, they decided to look around and check out Linda and Dennis' house before they made any decisions. Dennis's letter suggested they start in the basement, so Paul led the way. When they got to the foot of the stairs and turned the lights on, they could see they had a full basement, and one whole wall was dedicated to storage cabinets. As Paul opened the first cabinet on the left, he saw a huge inventory list attached to the inside of the door that had obviously been prepared as a spreadsheet listing every item in inventory, how much was in inventory, and the rotation dates for the product. The spreadsheet covered 5 pages in Portrait format. They decided to take it back up to the kitchen table where the light was better to check it out.

When they reviewed the list, it was obvious that Linda and Dennis weren't just planning to supply just the two of them. Jodi remembered a conversation she had with Linda years ago

about their preps. She said that they couldn't have kids, and were rolling in dough. She knew that Paul and Jodi weren't really preppers, so instead of making them store everything, they'd order enough for everyone for 5 years. Looking at the list, there was easily enough for both families to survive 5 years comfortably. What Paul didn't understand was the Toilet Paper only occupied 1 bin, yet they showed enough TP to last them 5 years easy. He noted the cabinet number, opened the correct door, and there was a bunch of vacuum-sealed heavy plastic bags full of janitorial supply TP without rolls. Dennis must have had access to a commercial vacuum sealer, because the packets were flat as a pancake, yet each packet was a month's worth of TP. Paul realized Dennis went to great lengths to prepare. He wished he hadn't laughed when Dennis suggested they prepare. Still over the years, Dennis must have rubbed off on him, because they started buying food, and now had a 90-day supply. According to the spreadsheet, Dennis made him look like an amateur. They had over 5-years worth of food and supplies for 6 people, and it looked like they rotated supplies on a regular basis.

Finally he got to an item he was curious about - Dennis' armory! He vaguely remembered Dennis saying something about it being in a corner of the shelter, and checked all the corners. One corner had a counter like a bar. Knowing Dennis didn't drink, Paul keyed on it. Finally he leaned on the side of the bar, and it moved. He gave it a bigger shove, and it moved 6 feet, clearing a staircase that led downward. He called Jodi, and they investigated the new staircase. Jodi remembered to bring the keys just in case, and at the foot of the staircase was a doorway with a keyhole that looked like it belonged on a coke machine. She stuck a key in the keyhole that looked like it fit, and turned the key. The door clicked, and opened by itself. Paul had a look on his face like he'd just won the Lottery.

As he entered the door, he saw a rack of Bushmaster HBAR AR-15's that Paul remembered shooting with Dennis before the PRC passed their stupid Assault Weapons Ban. They were the flat-top variant with a nice 3x12x50 scope mounted. Next were 6 LBV's pre-loaded with 10 20-round AR-15 magazines, and all their other gear they would need in an emergency. 6 pistol belts hung next to them with military cammo butt packs, canteens, and a SAS drop-leg holster containing a Glock 21 and several spare mags, the opposite side had a Ontario RTAK knife designed by Jeff Randall. He remembered reading the articles in American Survival Guide about Jeff and his company Randall's Adventure & Training that designed the knife based on their experience in the Peruvian jungle training Peruvian Special Forces operators in jungle survival techniques. Dennis told Paul that any knife that could survive the Peruvian jungle and do any task needed would work perfectly in the Pacific Northwest. They got kydex sheaths with a piggy back pouch from their friend Dave at Sheath Mechanic that carried a Diafold sharpener, compass, ferrochromium rod and striker, and a small LED keychain light.

As his gaze swept the room, there was even more stuff down there, a reloading bench with a Dillon Progressive press, several turret heads already set up for different calibers, and a selection of powders, bullets, primers and brass - enough to make over 10 thousand rounds. Next to it was a Lee Reloader set up to load shotgun shells. Paul didn't see any shotguns until

he turned around and spotted another rack full of shotguns. There were 2 Mossberg 590s with ghostring and tritium sights, and a pair of Benelli Super Black Eagles. Paul smiled, Dennis always did go first class! On the floor next to them were several cases of shotgun ammo. He walked over and there were 4 cases of Federal Tactical 9-pellet 00 Buck, 2 cases of Federal Tactical 1oz Slug, and 2 cases of Federal Target loads, all in 12 gauge.

On the opposite wall was Dennis's most expensive purchase - 6 Level IIa bullet resistant vests with plates. 2 of them were fitted for Linda and Jodi, since women's vests were form-fitting, and had their names tagged to the epaulet. Next to the vests were 6 Camelback daybags loaded with enough gear to survive for several months on the run. They decided on the low-drag, high speed gear instead of buying huge backpacks because they were planning on bugging-in, and anything that would make them leave their houses probably meant they needed to get away fast, and rely on caches Dennis and Paul had buried over the years. Paul thought his friend had lost it, burying perfectly good supplies and stuff in buckets just in case he would ever need them. Now he realized his recently departed friend was right, and hoped the lessons would sink in fast. If it weren't for Dennis, he'd have to risk their lives looting or scavenging for supplies, instead of staying in their nice warm cozy house. He said a special prayer of gratitude for Dennis, and hoped he was at peace in Heaven with Linda.

He remembered when they first met Linda. She was the Store Manager at their local grocery store, and Paul had bitten into an olive pit that had fractured a tooth and required \$2,000 worth of Dental work. He complained to the clerk, who called for Linda, who took them into her office. She said the company would be willing to pay for the damages, but needed the General Manager's authorization to reimburse them that much money. She pressed a button on her phone, and Dennis walked into the room, shook their hands. He was relieved that they weren't going to sue, and Paul said they were Born Again Christians, and didn't sue at the drop of a hat. Dennis smiled, hugged Linda and said "We're Born again too!" They spent the next half-hour talking, and Dennis wrote them a company check for Paul's dentistry, then suggested they get together Sunday at their church. That was the start of a friendship that had lasted through the years.

Paul snapped back to the present when he realized Jodi was talking to him. "Linda said something about setting something aside for us - I guess they decided to go all out."

"Based on that inventory list, they had enough stuff in storage for the 6 of us for 5 years. I wish Dennis were here so I could thank him."

"Paul, let's do this tomorrow, I want to go home now and be with you and the kids."

They climbed back in their truck and headed home.

Melissa and Larry woke up at first light, and while Melissa made breakfast, Larry scouted around. The flood had removed all the trees and houses, and swept them downstream. All signs of human habitation had been removed by the force of the flood. Larry decided to do a radial search using his compass by setting a bearing and walking away from the foundation on that bearing, and using the back-bearing to return on. Normally he could navigate without a map and compass in his immediate area, but all the familiar landmarks were gone, and his only points of reference were the distant peaks of the Sierra Nevada. He told Melissa what he was going to do, and his general direction of travel. He located his FRS/GMRS radios in his Conex box kit, and checked the batteries. He set up the solar-powered charger in the sun, then charged the batteries since he wasn't going far enough to need the radio. "Hurry back Larry breakfast will be ready in about half an hour." Larry nodded, then headed off to the north their neighbor's house was maybe 100 yards due north of their's. After scrambling over debris fields, he went about 100 yards, and spotted his neighbor's foundation. He said a quick prayer that they had their basement door sealed when the flood hit. Nick was the resident "Survivalist Nut" as the neighborhood called him, and had constructed a "bomb shelter" as they derisively called it in his basement. He didn't know if Nick had made it, but had to find out. First of all they were friends, but more important was if he didn't make it, Nick's supplies could help them survive. Looking at his watch, he realized he needed to head back for breakfast. He could see the tents, so he didn't bother with the compass, and walked back to give Melissa the good news. Once breakfast was over, Larry told Melissa he was going to check on Nick's place, and if he wasn't there, they needed to either relocate all their stuff to Nick's shelter, or move his stuff there.

"If he's got real beds in his shelter, and it's habitable, I vote we move there! We need some place warm for the winter even if we don't get any snow."

Larry agreed, then walked back over to Nick's door, cleared the debris off the door, hit it 3 times with a hammer, then tried the lock. The door was unlocked but sealed. Saying a brief prayer of Thanksgiving, he turned the knob and lifted the door. The nitrogen gas lifters helped, and soon the door was all the way open. He shone his flashlight down the staircase, and was amazed there was no water on the floor. He climbed down the steps, spotted a battery powered florescent lamp and turned it on. He smiled when he saw how big and well-stocked Nick's shelter was. He even built separate bedrooms and a bathroom with a stand-up shower, toilet and sink. Satisfied that Nick's shelter was better than living in a tent, he left the door open, walked back over to their camp, and asked Melissa if she felt like moving again. He told her Nick's place had 2 bedrooms and a bathroom, plus several years worth of supplies. Melissa heard the word "Bedroom" and stood up to kiss Larry, then said "Let's hurry up and get everything over there."

Even using the game hauler, it took the rest of the day to move all their stuff to Nick's place.

Melissa made dinner while Larry put stuff up and inventoried their supplies. Nick had a large buried propane tank, and Larry hoped it was full. The 5Kw generator charged their battery banks, and the waste heat made hot water for them. Nick had solar panels on his roof, but now they were gone. If Larry could locate some more, he'd replace them and save the rest of the propane for cooking. Nick had a small cast iron stove as a back-up heat source and means of cooking, but had no wood stowed in his basement. Larry hoped it was an oversight on Nick's part. Larry checked the supplies after they got everything moved in. Nick had a floor to ceiling stack of 5-gallon buckets full of whole wheat berries, oats, rice, beans, sugar, flour, salt, pepper, coffee, tea, and other stuff along the whole back wall. Larry guessed it would feed his family between 2 and 5 years if he supplemented it with fish and venison. He needed to start hunting, scavenging other houses, and building a new house for his family - they couldn't live underground for the rest of their lives - they'd run out of fuel eventually, and there was no natural sunlight in the shelter. After dinner, they took a shower and slept in a real bed for once since the disaster. Melissa made sure Larry knew how much she appreciated sleeping in a real bed that night.

The next morning, Larry woke up sore, but with a big silly grin on his face. After a shower and breakfast, he told Melissa that he needed to do more exploring. Melissa kissed him, told him to be careful, and handed him his fanny pack kit, and his FRS/GMRS radio, which was fully charged by now. He hoped the Glock 21 would be sufficient for self-defense, he wanted to keep his hands free. He remembered something, put his stuff down, and told Melissa that they didn't locate Nick's armory. After 2 hours of fruitless searching, Melissa sat down and leaned against the table. She noticed it was fixed to the floor, and called Larry over. Between the two of them, they barely got the trap door open. The table stood on its end, holding the door open, and Larry took his flashlight to investigate. What he saw reinforced his original opinion of Nick as a "Survivalist Nut" - he saw several Assault Rifles, cases of ammo marked NATO 5.56mm, a dozen boxes labeled 40mm that he didn't know what was in them, and really didn't want to know, and some others labeled M -18 APM, and another labeled M -16A1. Next to them were several vests like what he saw the Marines wearing in Iraq. Finally on another rack were weapons he was more familiar and comfortable with. There were 2 lever action rifles, including a .44 Magnum, and a 30-30, and a couple of pump shotguns. Larry didn't realize it yet, but Nick got them just for people like him who wouldn't be comfortable with "Assault Weapons" thanks to the socialist indoctrination they received in school, and were reinforced by the nightly news. Larry decided to leave the armory alone for now, put everything back the way it was, and with a shudder, walked back up the stairs.

*** That Same Day, Winnemucca Nevada ***

That morning after Breakfast, Herbert told Martha he was going out to do his chores. She made him put on his goggles, filter face mask and poncho before she let him out the door. When he got outside, he could see the ash had stopped falling, so he took everything but the face mask off, it was too danged hot to wear all that paraphernalia. He swore Martha would

make him wear a MOPP suit to muck out the stalls! He walked over to the barn, and the cow was busy nursing both calves. He checked on the orphan, who looked like he recovered OK from being orphaned and almost starved to death. Before he left, he gave Bessie some fresh water and feed, petted her and brushed her, then checked on the rest of the barn. Finally he could delay his return no longer, and trudged back inside to face Martha, who was about as cranky as a cow about to give birth because she hated being cooped up in the shelter. Herbert realized with the ash clearing, it would be safe to occupy the house, but it would take a lot of work to clean it up, and they'd both have to wear face masks and goggles to protect themselves until they got the ash out of the house. He went back in the shelter to tell Martha, and she kissed him like he told her he'd won the lottery, and made plans to clean the house top to bottom and move back into the house, instead of this "danged cave" as she called it. Herbert knew he needed to clean the ash off the roof, and had an idea that would work. He'd use his Polaris Ranger, some rope, and a bunch of 2x4's to pull a plank up and over the roof in sections. It wouldn't be perfect, but it beat the alternative. He told Martha what he wanted to do, and she agreed he could do it - Tomorrow.

*** Later that same day, Bret's house ***

Life in the compound had settled into boring monotony, and they were counting the days until they could get back to their own houses. After breakfast, Bret noticed the ash had stopped falling, and taking it as an omen, called everyone together, and gave them the good news. The infants would have to stay inside the shelter, but they could go outside and start cleaning up. He made a list of stuff that needed doing before they could get to their houses and clean them. They quickly tackled the short list, then drove over to their houses to clean them up. Ricky and the Explorers volunteered to help, and two of them went with each couple to help clean their houses. Ricky and Diana went with Allen, Veronica, Bear, and Nancy; Ben and Elizabeth went with Jim and Gloria, Ralph and Sally went with Brad and Kelly and their family. Bret, Maggie, Mark and Andrea helped Jeremy and Natalie clean off "their" house. After a hard day's work, they returned to the shelter because their houses weren't fit to occupy yet. It took almost a week of hard work to clean all the houses, and move their stuff back. Moving Brad's Tilapia/hydroponic system was the most work, and took almost a week by itself. He almost left it where it was, but didn't want to have to walk over to Bret's house each day to tend his tanks and hydroponic system. Bret decided to move his system to the "steam house" while they were moving everything, and use his basement for storage. Later that week, they got the pig sty and chicken coop cleared of ash, but the horses pasture was covered in almost a foot of ash. The grass was probably dead by now anyway, so they decided to expand their corral and leave them in the garage for now.

Chapter 28

*** The Next Morning, Bret's House ***

Bret remembered that the Explorers wanted to go shooting at the quarry. With the immediate tasks taken care of, he thought, "no time like the present" and contacted everyone, and told them they were going shooting that morning at the quarry. Bear and Bret loaded their trucks with guns, ammo, and targets, and loaded everyone in their trucks. With the 8 Explorers, they needed extra vehicles, so everyone piled into vehicles, and drove to the range. When they got there, Bret swore, with almost a foot of ash on the ground, shooting prone would be difficult, so he sent Allen back to get the Bobcat loader, drive it over to the quarry, and clean the ash off the lanes. When he finished, Bret and Bear were setting up targets, Allen, Jeremy, Ricky and Maggie unloaded the guns while everyone else helped out with the ammo and supplies.

Bret made sure everyone had eye and ear protection when he got back, and gave everyone the "new shooter" safety lecture since it had been a while since they were shooting at the quarry. He set up a dozen B-27's from 600-100 yards, and another dozen from 5-25 yards for pistols. Ricky, Mark, and the rest of the rifle shooters started on the 100-yard targets to confirm their zeros. Once they were sure the scopes were set, they moved to the 300-yard then the 600 yard line. Only Ricky and Mark attempted the 600-yard line. Allen, Leroy, and Ben were content to stay at the 300-yard line with their AR-15's even with the 3x12x50 scopes. Mark's best group with the Remington 7mm Magnum at 600 yards prone was right around 8 inches, and Ricky shot a 10-inch group with the AR-10T.

Bret took all the girls to the pistol range to teach them how to shoot the Glock Model 21 correctly. They were all nervous, but decided they either needed to get over their nervousness or face the consequences. Scoutmaster Andrews' words rang in their heads, and reminded them that the "Rule of Law" had been replaced by the "Law of the Jungle" and there were a bunch of predators out there. Bret asked Natalie to go first, and after a brief coaching session, she put all 14 rounds from her Glock 21 into the 4-inch orange sticker at 15 yards. Bret was watching Diana and the rest of the girl Explorer's reaction to a 14-year old girl shooting the Glock like it was no biggy, and putting all the rounds in the center of the target. Diana got her courage up, and asked to go next. Bret decided to teach them all to shoot Weaver stance so everything would be consistent, and when Diana got comfortable, he had her do a dozen dry fires, paying attention to where the sights were when the trigger went "snap", then he added putting a nickel on top of the slide. Diana managed to get off 10 repetitions without the coin falling off, so Bret gave her a loaded magazine, and watched as she stuffed the magazine into the well, and cycled the slide. Everyone was already wearing their eye and ear protection, so when Diana looked at her, he gave her a thumbs up, and waited. She took a deep breath, blew half of it out, and when the sights settled on the center of the target, she squeezed the trigger. She was dumbfounded by the lack of recoil, but she knew the gun went off by the noise and the bullet hole in the center of the target.

She fired the rest of the magazine the same way, then admired her target. She had 10 out of 14 rounds in the sticker, and the rest were within an inch of the sticker, but still within the 5x Kill Zone on the target. She dropped the magazine, handed the gun to Bret barrel down, then ran back to her friends "You guys would never imagine how easy it is - I always thought that it would hurt, and the barrel would wind up facing the moon. Go ahead Sally, give it a try!"

Sally practically ran to the shooting line in her eagerness to try shooting the Glock. Bret went through the same process with her, with similar results. Next it was Andrea's turn, then finally Elizabeth's. Once they had all been coached by Bret, he turned them loose with a G-21 each, and a box of practice ammo at the 15-yard pistol range while he stood back and watched. Andrea seemed to be having a problem with the big grip of the G-21, and searching the pile of Glocks they got from the Sporting Goods store, he spied a Glock 36 single-stack 45. He opened the box, and there were 4 six-shot magazines for it inside. He thought that was weird, because Glock only included 2 magazines. Upon further examination, he realized the gun must have been a used gun when he spotted some holster wear marks. Digging deeper, he found a Bladetech IWB holster and 4 mag carriers for the gun, and knew it must be a used gun, since none of the other guns came with holsters. He showed Andrea how to shoot the "itty-bitty Glock" as he called it, and she was happier with it - she could easily reach the trigger, and her small hands just covered the bottom of the grip. She loaded all 4 mags with practice rounds, went back to the shooting line, and Bret could see she was shooting better - all her rounds were in the 5x ring now, and most of them were in the 4-inch sticker. He wisely decided that it was better to hit with 7 rounds than to miss with 14, and told her to keep the gun. He'd give the bigger gun to someone else.

Later that afternoon, Bret asked Diana if they wanted to try shooting the rifles, and selected 4 scoped AR-15's. By now there were 5 slots available on the 100-yard line, so Bret set them all up at once, coached them through the Military Prone position, and how to use a scope. Again they dry-fired the rifle 20 times each, paying attention to the position of the cross hairs when the trigger broke. Finally they loaded their 20-round magazines with live ammo, pushed the mag into the mag well until it locked, then pulled back on the charging handle. Diana's first group looked like it was about 3 inches across in Bret's spotting scope, and the rest of the girls looked like they were shooting 4 inches or less. They looked like they had applied the trigger and breath control techniques they learned from firing pistols. Once Diana's groups shrank below 2 inches, Bret suggested she try the 300-yard line, and gave her a preliminary drop adjustment for her scope. She clicked in 12 clicks of drop, and got prone on the 300-yard line. Her first group was 3 inches low, so Bret explained the Minute Of Angle principle, and that her scope adjustment was in 1/4moa, so she needed to add 4 more clicks. She adjusted her scope, and her next round went through the bull's-eye. The rest of her group opened up to about 10 inches, so Bret said she needed to practice and try and get that group size down.

Later that evening, Ricky surprised Bret when he asked if he and Diana could get married.

"Ricky, you don't need my permission, you're both over 18. If you want my blessing, you have it. Brad is an ordained minister if you want him to do the wedding."

"Thanks, I think Diana would like to be married by a minister, even if it isn't in a church."

"Rick, the church is the people, not the building. You've been to Sunday Services before - we'll have your wedding in the same room. I guess this means we'll have to find you and Diana a new house."

"That would be great Bret, hopefully one that's furnished, we only have the clothes and supplies we brought, and the weapons you graciously gave us."

"Nothing gracious about it Ricky - we took them from an abandoned sporting goods store. I still feel like a looter every now and then."

"A looter steals stuff he doesn't need, what you were doing was scavenging stuff we needed to survive. If you hadn't taken everything that wasn't nailed down, either looters would have gotten it, or burned it in the riots, or it would have been lost or damaged when the buildings collapsed due to the weight of the ash on the building."

"That reminds me - we need to do another scavenging run before it rains and the waterlogged ash collapses the buildings. We need some more supplies for the eight of you, including baby stuff, etc."

"Veronica managed to convince Diana to wait on having kids."

Bret started laughing "She did have a pretty hard labor, come to think of it. Not every delivery is the same. Gloria had a relatively simple delivery, and Kelly had the least problems of all, then again she's much older and already had 2 kids. If Veronica had waited until she was in her 20's, it might have been different."

"OK, you've convinced me - anyway, we still want to get married."

"I'll call Brad, any idea when?"

"As soon as we can locate a new home and get it ready. I'd like our first night together to be in our new home."

"Sounds like a plan - I'll fire up Babe, and the 3 of us can take a look at the other houses."

Ricky went to get Diana as Bret fired up his truck. Seeing there was only 2 seats in the truck, Ricky gallantly offered to ride in the back, sitting on a milk crate and holding onto the roll bar. Bret thought "Better your butt than mine kid!" and they drove up the bumpy road past Jeremy and Natalie's house. The next house turned out to be a real dump, so they kept looking. When they reached the Quarry, Bret turned right down a road he hadn't been down in years, and there were 6 houses down the road he could see from their driveways.

He drove down the first driveway, and saw it was a conventional stick built house, but it had thin-film solar panels on the south-facing roof, so Bret hoped that the rest of the house was up to snuff. They parked up front, and Bret used his electric lock pick to open the door, and was greeted by a horrible smell. He ran back, and told them not to go inside until he had vented the house, grabbed his gas mask hoping it would kill the smell, and went searching to find the smell. The contents of the refrigerator and freezer had rotted, so Bret knew that this house didn't have an automatic transfer switch, or the ash had covered the panels, and the battery bank had run out of power. He checked the rest of the house, and found another reason the house smelled so bad. There on the floor was a dead toy Poodle that looked like it had starved to death. Bret's heart broke for the poor dog, and using a dustpan, scooped the poor dog's body into a large trash bag. He checked the rest of the house, and except for some dried dog poop, the house was in pretty good shape.

He found the door to the basement, opened the lock with his tool, turned on his flashlight to see where he was going, located the transfer switch, threw it, and the lights came on. He never understood some people, a auto-transfer switch didn't cost that much, and if you had a freezer full of meat, it was worth the extra cost. With the basement well lit, he did some more exploring, and found some supplies, but not as much as he had hoped. Still they had power and water now that the transfer switch was on. He walked back up stairs, picked up the bag containing the dead dog, and carried it out back to locate a shovel and bury it. He picked the garage door lock, and inside was a nice Jeep CJ that looked like it was set up for off-road driving by someone who knew what they were doing. He found the tool rack, selected a shovel, and dug a hole in an out-of-the-way location to bury the dog.

When he finished, he walked back around front, explained the condition of the house to Ricky, and advised they not go inside without a gas mask until they could do something about the smell. Diana heard Bret tell Ricky about the dog, and started crying on Ricky's shoulder. She had a white toy poodle at home just like the one Bret buried. Ricky asked Bret if they could check the rest of the houses while they were at it, so they drove out and down the next driveway. Bret was confused when the house looked almost identical to the other one, except it was a different color, and had different trim. They even had the same solar panels on the southern exposure. Bret hoped they had sprung for the auto-transfer switch, or this was going to be 1 smelly day.

Over the rest of the day, they checked out the rest of the houses, and they were all variations of

the same plan, and were similarly equipped. Fortunately only the first house had a dead dog in it, and the rest didn't smell as bad. They drove back to Bret's house, and after dinner, everyone agreed to help clean up the other 6 houses for the Explorer Scouts, who turned out also wanted to marry their girlfriends and settle down. Bret smacked his forehead, and said "Ouch!" knowing that this was a case of "monkey-see, monkey-do" but he was powerless to stop it. According to Ricky, since they had been stranded and stuck in the shelter, they had naturally paired up, and what were once casual friendships blossomed into romance during the enforced confinement. None of them had gotten seriously physical yet, but knew they wanted to spend the rest of the time they had with each other. Bret was glad for small favors, and decided to go ahead and have a group wedding as soon as they could get the houses cleaned up and habitable. Everyone pitched in, and within several weeks, all 6 houses were cleaned up and ready for occupation. Bret realized that they might as well clean all 6 houses now while they were at it, in case the came across any more refugee families. When Brad was told that all 8 Explorers wanted to get married at the same time, he got a major headache - he thought 2 at a time was enough for him. Finally he told Bret he'd marry them, but one at a time so he wouldn't get the names mixed up. He'd give the sermon and instructions to the group as a whole, then have each couple repeat their vows 1 at a time. Once the ceremonies were through, they held a group reception, then they each retired to their new homes for their honeymoon.

*** That Same Day, near Grass Valley, CA ***

Larry climbed the stairs, belted on his fanny pack, and told Melissa he was going to check out the neighborhood. He had his FRS/GMRS radio turned on, and would check in every hour or so. He belted on his fanny pack and Glock, then opened the shelter door and climbed the stairs, then opened the shelter door. The bright sun hurt his eyes for a minute, then he remembered his sun glasses in his shirt pocket, and put them on. He could see much better with his sun glasses on, so he climbed all the way out, closed the shelter door, making sure it wasn't locked, and took a bearing to Nick's neighbor, about a half-mile to his west. He had to detour around several debris fields and backtrack to get back on his bearing. Finally after an hour, he located Nick's neighbor Mike's house, or what was left of it. It was farther away from the river, so it had been destroyed, but not washed away. He cupped his hands and yelled "Mike, if you're there, it's Larry, I came up to check on you." Not hearing any response, Larry approached the house. Most of it was demolished, but there were some loose stuff he could salvage like cast iron pots and pans and other heavy stuff like an old cast-iron stove and stovepipe. He piled them off to the side and kept looking. Realizing he'd been gone an hour, he pressed the PTT button and said "Melissa, it's Larry. Everything OK?"

"Sure, the kids are a little restless, but other than that everything's OK."

"Ok, let the kids outside if you want, but make sure you keep them in sight, I'm not sure if there's any feral dogs or mountain lions around, so wear your fanny pack and Glock."

"Yes dear."

"I'm checking out Mike's place, I'll call you in about another hour."

As he walked around the other side of the house, he couldn't believe that Mike's garage was still intact. He fought with the door, and finally got it open. There sat his 1953 Ford pickup. Mike never locked it, because it was an old unrestored beater truck. The engine ran fine, but the body looked like it had been through WWII. Larry opened the door, and the key was in the ignition just like Mike always left it. Saying a quick prayer, Larry climbed into the cab, turned the key, and the engine coughed and sputtered, then finally caught. He checked the fuel gauge, and the tank was half-full. Even with the total lack of roads, the way from Mike's to Nick's house was flat enough so he could load his booty into the bed and drive it over much quicker than using the game carrier. He backed the truck out of the garage, and left it idling long enough to make sure it would start again while he scavenged anything useable out of Mike's garage. He didn't come up with much, just some motor oil and some miscellaneous tools. When he loaded them into the bed, he drove the truck over to the front door of Mike's house and shut the engine down. He loaded the cast iron stove and cookware, and anything else that could fit into the bed, then called Melissa.

"I found Mike's old truck and got it running. I'll be there in about 10 minutes with a full load in the bed. You too - see you in a few."

Larry drove slowly over the bumpy and uneven ground, but even 10mph in an old rusty pickup beat walking and carrying the stuff in several trips. Melissa helped him unload, gave Larry a big hug, then he drove back over to Mike's house again. This time he risked checking out the interior of the house. The house was a pile of rubble, but he could clearly see the kitchen and basement entrance of the house. He took several items he could reach in the kitchen without moving any building materials, he didn't want the building to fall down on him! The basement door was wood, but it was closed. Still there was mud against the door, so he thought that water might have gotten under the door. Still there might be some salvageable stuff in the basement on shelves and stuff. He tried the door, but it was locked. Finally he took a large screwdriver, wedged the blade between the door and the jam right where the bolt of the lock went into the jam and heaved. The jam flexed and the door popped open. Larry caught the door before it could swing back and slam shut, and unlocked it.

Next he propped a rock up against the door to hold it open, took out his flashlight and shined it down the staircase, which was covered with mud, but he thought he could safely make it to the basement thanks to the dual railings Mike had installed. Slowly, Larry climbed down the slippery staircase, using the railings to keep his footing. Finally he reached the bottom, spied a push broom, and used it to clear off the stairs so he could climb them without using the railings. He pushed the pile of mud off to the side, and swept the light around to see what Mike had in his basement. The floor was wet, but there wasn't standing water, then Larry spotted a floor

drain in the middle of the basement that explained why the floor was pretty dry.

He found an old kerosene lamp filled with fuel, and a Zippo lighter sitting next to a pack of Camel unfiltered cigarettes. Larry didn't smoke, but appreciated the Zippo lighter. He used it to light the lantern, and was amazed at how well it lit the basement when he put the globe back on the lantern. He adjusted the wick until it stopped smoking, and then surveyed the basement. He found a 5-gallon red plastic container that said "kerosene" and knew it was fuel for the lantern. He was glad the container was mostly full. On the shelf above it was several more lanterns, and parts box full of wicks, and 3 spare globes. He carried the lanterns, wicks, and kerosene out to the truck in several trips, then went back down to find what else Mike stored in his basement.

He located several plastic trash bags that he almost skipped, then he decided it might be important and opened them. They were full of clothes that Larry guessed Mike was going to donate to charity, but never got around to it. He hauled the clothes up to the truck because even if the clothes didn't fit, they could use the material to make new clothes for his kids. There were no fabric stores anywhere that he knew of, and from what he'd heard on the radio before the flood hit, most of California and the rest of the Pacific Northwest was heavily damaged by earthquakes and tsunamis. If his guesses were correct, he'd have to scavenge anything they would need for the immediate future, and recycle everything he could. Over the rest of the day, he cleared everything he could out of Mike's basement, whether he needed it right now or not. He sorted the stuff onto piles on Nick's foundation, then took some poly tarps and covered them. He put rocks on the corners of the tarps to hold them down.

*** That same day near Roseburg, OR ***

Jodi and Paul woke in their bed, and Jodi rolled over "Paul - we should move to Linda and Dennis' house."

"You sure Jodi?"

"Let me tell you about the dream I had last night. We were sitting in lawn chairs in their back yard, it was the 4th of July, when all of a sudden the EAS tones blared over the radio that a minute ago was playing patriotic music. The announcer said "NORAD has just notified the FCC that a massive nuclear attack has been launched by Communist China. People are urged to seek immediate shelter in the next 10-12 minutes. You need either 8 feet of dirt, or 1 foot of concrete to protect you from fallout. This message will repeat." We started freaking out until Dennis told us to get in their shelter, it was better equipped than our basement, and they had bought enough stuff for the 6 of us to live in there comfortably for 5 years if necessary. We gathered up the kids, and made it inside the shelter right before the nukes went off, and I woke up. Don't you see, Dennis and Linda wanted us to be able to use their shelter and supplies. It's stupid not to. All I ask is we move our bed into their bedroom."

"Ok we can disassemble the bed and move it, but that means we need to move their bed out first."

"I'll help, let's get up, get everyone fed, then start the process of moving everything to their place." It took the rest of the day to take their bed apart, break down Linda and Dennis' bed and move it into the spare bedroom then put their bed together in Linda and Dennis' bedroom. The kids packed their bedrooms, and helped load it into the truck. It took them several days to move all their stuff to their "new" house, but finally they were finished. They took the next couple of days off and relaxed.

***That same morning, near Winnemucca, NV ***

"Herbert, get up, I'm ready to start cleaning our house."

"Martha, what's gotten into you - you've never got up so early since you were working."

"We're burning daylight sleepyhead. Breakfast will be ready in 5 minutes."

Herbert decided it would be easier to get up then listen to Martha nag him. She had breakfast ready by the time he sat down, and she sat a large plate of pancakes with syrup in front of him. "Oh Heck!" thought Herbert - whenever Martha made a special breakfast, it usually meant he was in for a long day of hard work! Herbert's instinct was correct, Martha wanted to get back into "her" house ASAP, and he spent the rest of the day sweeping, picking up any ash that got inside the house with a shop vac, and finally cleaning off the roof.

His idea of using a large plank to scrape the ash off the roof worked, sort of. What he wound up doing was tying two long ropes to a 10-foot long 2x12 plank, throwing them over the roof with weights, setting a set of 2x4's up against the eave of the roof to act as a ramp, then tying the ropes to the back of his Polaris Ranger, and pulling the plank up and over the roof slowly. It took several tries to get it right, then he started clearing the roof in 10-foot sections. With a 60-foot roof, it took 8 passes to clean it. Then he towed the air tank out to the banks of solar panels, and blew the ash off the panels using the blowgun tip. He wound up covered from head to toe in ash, and decided he'd had enough. He drove back into the barn, carefully took off his poncho, boots, and goggles, then got undressed the rest of the way and took a shower in the spare shower he used after he butchered animals. He got the rest of the ash off, then changed into clean coveralls, and put on a clean filter mask, because he didn't know if Martha had gotten rid of the rest of the ash while he was out cleaning off the roof. He walked inside, and she wasn't wearing her mask, so he started taking his off. Martha was about to lecture him when she remembered she wasn't wearing her mask either, and shrugged, turned, and went to start dinner.

Chapter 29

*** The Next Morning, near Grass Valley, CA ***

After breakfast, Larry got back in Mike's truck, and drove back to Mike's house to scavenge some more stuff. He was coming out the front door with a big box full of stuff when a shot rang out, and Larry fell to the ground dead. 5 minutes later, Mike walked up, rolled the body over, and started sobbing when he realized he'd killed his neighbor. Later that afternoon, he followed the tire tracks back to Nick's place, and Melissa was out front with a worried look on her face. She didn't recognize Mike in his cammo clothing, and as soon as he got out of the cab with his rifle, she pulled her Glock and shot Mike, who reflexively shot her in the chest. As they lay there dying he said "I'm sorry Melissa, I accidently shot Larry at my place, I thought he was looting. I only came over to apologize, why'd you shoot me?"

"I didn't recognize you in your cammo clothing, and when you pointed that rifle at me, I thought you were going to kidnap and rape me."

"I was getting the gun out of the truck so I could sling it over my shoulder."

"Oops!"

Melissa's last thought was that she left her young kids in the shelter, and the door was way too heavy for them to open. She prayed someone would find them before they starved, then she rolled over dead.

*** That same morning, Roseburg, OR ***

Jodi and Paul woke up in a strange house, remembered why they were living there, and rolled over and held Paul. When she calmed down, they both made breakfast for their 4 kids. They had 2 teenagers that were a big help, and a 4 and 5 year old that alternated between being angels, and several notches less than angels. Jodi was glad that this morning they were being angels. Paul decided that he needed to check out the solar panels and the AE system. He went to the basement, and was surprised that the panel indicated the solar panels were only putting out 30% of their rated power, when the sun was shining brightly that morning. He almost smacked himself when he remembered the volcanic ash had built up on the roof, and needed to be swept off. He walked back upstairs and told Jodi what he had discovered, and that he needed to clean off the roof, or they would be low on power. They discussed how to do it, and finally they settled on using their truck as an anchor, and Jodi would belay him on a long climbing rope they had in their emergency kit.

Paul put on the climbing gear, tied the rope to his harness, threw the other end over the roof

with a weight, set the ladder onto the roof, picked up the push broom, then set everything down, and called Jodi on the radio, who said she was set up on her end. He told her to put on her filtermask, the ash would be coming down on her side. She told Paul she was well away from the roof, wearing a poncho, mask and goggles like Linda had told her to when they discussed the aftermath of a volcanic eruption. Paul grabbed a set of goggles as well, then told Jodi he was climbing, and to take up slack. When he got to the top of the roof, he swept off the side with the panels first, then started on the other side. It took most of the day, and he had to stop frequently for water breaks. He finally finished around dark, and they went inside. Jodi was pleasantly surprised when her 14-year old daughter said that she made stew for dinner, with a pack of frozen dinner rolls. Jodi gave Nicole a big hug, and thanked her, then they sat down to eat. While they were setting the table, Paul took a quick shower and changed, then Jodi took one after dinner. They sat on the couch after dinner cuddling. Paul rolled over to face Jodi, "You know Nicole made dinner tonight without being asked - she's acting so grown up lately."

"Honey, all of the kids are growing up. I hope we've done a good job raising them, and I hope there's a world left after all this for them to marry and raise families."

"Hopefully this will be the last event, if Yellowstone blows, it'll be TEOTWAWKI!"

"What's TEOTWAWKI - I've heard Dennis say it before, or was he choking?"

"It stands for The End Of The World as We Know It - Remember the REM song?"

"Vaguely, I wasn't much of an REM fan."

"You know what SNAFU stands for, and obviously you now remember The Shit Has Hit The Fan, TEOTWAWKI is the opposite end of the spectrum of disaster situations. We might recover from a SHTF scenario, but if it was TEOTWAWKI, the survivors would be forced to adapt and overcome, or die. We're pretty well situated here, but eventually we'll run out of food and supplies. We need to start planting a garden and canning the produce as soon as we can. I also need to find and shoot a deer, and we need to freeze or can it. While we've got the freezer, I'd like to save the cans for vegetables, since we're not set up to properly freeze vegetables here. Robbie and Nicole are going to have to help out, and even Allen and Adrian can help do stuff. I'm going to have to read all of Dennis' survival books, then teach the children. The knowledge in Dennis' library could one day save their lives. I don't know how far society will fall, but between the earthquakes and volcanoes, I wouldn't expect the country to get back on its feet any time soon. That reminds me - when we're out from now on, we need to go armed, at least one of those pistol belts Dennis made up for us with a pistol and a butt pack. If we're going further, we'll need the AR-15's and load bearing vests. We also need to get Robbie and Nichole up to speed with the new weapons."

Jodi was afraid for her kids, but realized Paul was right, they needed to learn how to survive and defend themselves. If it weren't for Linda and Dennis, they might not have made it.

*** That Same Morning, Angeles Forest, CA ***

With all the community members spread out again, Bret and Maggie felt like they had all the room in the world again. Bear, Nancy, Jeremy and Natalie still lived with Bret and Maggie, but if they wanted to talk to anyone else, they had to use their FRS/GMRS radios. Ricky came upon a novel solution, and each family was assigned a frequency and code. They would always have a radio set to the main frequency for general or emergency notices, and they would each have a radio set to their personal frequency and codes so they could talk to each other, or they could call another family. They managed to get the ash off their roofs, and get their alternative energy systems charged back up and their cisterns filled, but several of them were short food and supplies. Bret suggested they make a list of the supplies they needed, and Bret would take a map and check off the homes they had already scavenged. They'd scavenge all the abandoned homes in the area they missed last time, and they might consider checking the Vons and Ralphs to see if they were still standing, and hadn't been looted.

Bret told everyone they had plenty of non-hybrid seeds to plant as soon as Spring came around, and tractors with plenty of fuel to prepare the gardens. What they were now way short of was canning supplies, jars, and lids. He hoped the ranches had some more, but he needed a pallet load of canning jars and lids to make a dent in what they needed. Also they would need to cut and split enough wood to replace what they had burned while they were in the shelter, and top off the propane, diesel and gasoline tanks, and get more for the Explorer's houses. Any Explorer whose house didn't have a vehicle got 1 of the maintenance trucks from the mine to use. It wasn't an ideal solution, but better than nothing.

It took several days, but Bret finally put together a plan. 1/3 of them would take the deuce and a half with the M -60 mounted, the tractor-trailer rig, and go check out Vons and Ralph's. Bret mounted a 2-meter ham and an illegally modified CB radio in the cab of the Deuce, so they could communicate with the rest of the teams. Leroy volunteered to ride shotgun on the deuce, and Brad said he'd drive the truck with Kelly riding shotgun. Bear had to drive the propane truck if they wanted more, so Allen volunteered to drive the deuce and a half. Actually he thought the old truck was kind of cool. Bret's Dodge would ride in the back of the convoy with a big trailer driven by Ricky and Diana. Bear, Nancy, Veronica, Ben, and Elizabeth would scavenge around the Propane dealership, taking Bear's truck and the Propane dealer's tanker truck. They too had a high-powered CB as well as their 2-meter radio.

The rest of them minus Gloria, who would babysit the babies, and Jeremy and Natalie who were responsible for protecting the community and the babies while they were gone, would scavenge the ranches between their fire road and Jerry's place that they missed the first time. Ricky noted the houses that were occupied, and quickly eliminated 1/3 of the houses they

needed to search. He wasn't sure about exact houses, but knew which streets had occupants, and which were deserted from their hike up the highway.

Before they left, everyone performed a radio check, and Jeremy made sure he could talk to everyone. Natalie was busy helping Gloria babysit, but had her LBV and AR-15 right outside the door. Jeremy had his kit right next to the radio, as well as the claymore and vehicle mine detonator. Everyone who was going scavenging was wearing a bullet-resistant vest, their Load Bearing Vest, their E&E kit including the butt pack, their personal pistol, canteen, knife, and spare magazines on a pistol belt. They brought all their MP-5SD's and Mac-10's for the suppressors if needed, and their M -16/ M -203's if they needed the firepower. Leroy connected 2 belts to the machine gun before they left, and told Allen to keep the speed down. Allen laughed, telling Leroy the only way he'd be going faster than 40mph was if they fell off a cliff. Leroy had to appreciate Allen's sense of humor - he would have made a good Marine!

With all the checks and goodbyes made, Allen led the convoy with the deuce since they had the farthest to go, and they turned and headed west when they got to the end of the fire road. They maintained vehicle contact with their low-power FRS radios to keep their chances of being detected to a minimum. They made good time to the 210 freeway, and saw that someone had decided that their route through the freeway was worth using due to the ruts and tire tracks. Leroy hoped whoever made those tracks was far away, and told Allen to slow down and be alert for an ambush. Suddenly Allen's pucker factor went through the roof, and he swallowed reflexively, and started scanning the road ahead, looking for any possible sign of an ambush.

They made it all the way to the hospital before they heard the first gunshot striking the deuce. Leroy located the source of fire, and a quick burst from the machine gun convinced who ever was shooting at them to look for easier pickings. Finally they made it to the Ralphs in La Crescenta and drove around the back. The parking lot was deserted except for several burned-out cars and trucks that they barely noticed. As they pulled around the back, it looked like someone had looted the place, and the door was askew. Brad was told to stay in his rig in case he needed to make a quick exit, while Leroy, Allen, and Ricky would check out the store. Since Kelly knew how to drive the rig, Brad told Leroy he'd man the machine gun while they were checking the place out.

Leroy got Allen and Ricky together, and told them his plan. The 3 of them would check the building out together, not getting separated. They'd carry their M -16's slung over their backs, and their suppressed submachine guns in the assault position, and ready to fire at anything that moved. He explained that anyone in the building was a potential threat, and not to risk their lives. With that he said "Lock and load ladies" and cycled the action on his MP-5. Allen and Ricky grabbed the cocking handle of their MP-5's and did likewise. They had the safeties off, and their fingers off the trigger like Leroy had trained them. Leroy was point, and responsible for anything from right to center. Allen was a lefty, so it worked great that his sector was from 10 o'clock to 7 o'clock. Ricky brought up the rear, and was responsible for their 6 o'clock to 3

o'clock. They stacked up in the entrance, and when they felt the hand of the guy behind them on their backs, they were ready to go. They snapped on their weapons mounted lights as they swept into the doorway, and were met with a scene of devastation. The shelves had been looted, the liquor bottles were broken on the floor, and the smell of rotting meat was bad enough to gag a maggot.

Seeing the store was not worth checking out further, they backed out, and searched the loading docks. There were several cases of food that the looters had missed, so they picked them up and set them in the deuce and a half, then gave everyone the bad news. Brad ran back to the tractor-trailer and got it turned around in record time. Allen reversed direction almost as quickly, and they drove down the road to Vons. Leroy noticed the closer they got to Vons, the less burned out buildings he saw, and hoped it was a good sign. They pulled into the empty parking lot, and drove around the back. The building appeared deserted, and the loading bay doors were closed. Leroy decided to do the same thing he did last time, and they stacked up in front of the back door. Leroy was the first through, and while the store was a mess, there still weren't any signs of looting, and the back storage area was full of the pallets they didn't take last time. Bret had told Leroy that if they found anything edible on pallets to take everything they could fit, and sort it later. They hustled down each aisle, and checked out the office, but the building was deserted.

They went out back, and decided it was worth the risk. Kelly backed the rig right up to the loading bay like a pro, and they quickly filled the trailer with pallets of food and supplies regardless of what they were. Cases that weren't part of a pallet were loaded in the deuce and the trailer of the Dodge after they loaded the tractor-trailer as full as they could. Leroy knew they were under time pressure, because there had to be SOME law enforcement presence in La Crescenta, or it would look like the neighborhood around the Ralphs. Hopefully they were busy elsewhere. Right when Leroy was going to order everyone out, Ricky told him the store was empty anyway, or at least anything still in a case, or in any shape to transport easily. They ran back to their rigs, backed the deuce first, then the tractor-trailer, then finally the Dodge.

They made it halfway to the hospital when 2 vehicles drove through the intersection in front of them, and 2 more blocked the road behind them at the next intersection. Leroy yelled "Ambush" over the radio, and opened up with the M -60, shredding the vehicles in front of them, then yelled at Allen to ram the pickup right at the rear tire. Allen must have seen something on TV, because he didn't accelerate until he made contact with the pickup truck. Leroy continued firing while Allen had the deuce floored. The tires smoked, and pushed the much lighter truck out of the way. Right as the way ahead cleared, Leroy saw a couple of Cadillacs full of gang-bangers heading right for them. He knew how to solve that problem, and fired the rest of the belt at the Caddies, then grabbed his M -16, and fired a HEDP grenade into the hood of the Cadillac that was still in the fight. The explosion took out the Caddie, and caused the other one to swerve, taking it right into a telephone pole, and stopping the car full of gang-bangers cold. The heavy bumper of the deuce made contact with the bumpers of the

Cadillacs, and knocked them further out of the way. The rest of the convoy made it through unscathed until they remembered the two vehicles in back. Ricky locked the brakes of the truck once they were clear of the ambush, jumped out, and fired a HEDP grenade into the biggest vehicle, and a full magazine into the smaller truck, shredding the hood and started the engine on fire. He jumped back in the pickup, and accelerated to catch up to the convoy.

They drove back over the 210, and headed back up the Angeles Crest Highway. Leroy told them to pull off the road to the right, bring their guns, and be ready to repel an attack in case someone followed them. They jogged 100 yards down the road, got into a trench, then waited. After an hour, Leroy was pretty sure they hadn't been followed, since Ricky kept an eye on his rearview mirrors, and never saw another vehicle behind them. They hiked much more tired than they were an hour ago back up to the vehicles, and drove back up to the fire road. They called Jeremy when they got close, and gave him the All Clear, and 3 vehicle count. Once they were clear, Ricky told Jeremy to keep a lookout, they ran into some trouble in La Crescenta.

An hour later, Bret called in, then half an hour later Bear called in as well. Gloria and Natalie made dinner as everyone got caught up. Bret was glad no one was hurt, and decided to put the kibosh on any further scavenger trips to the west. He told Ricky that they hit the jackpot in their scavenging trips. Bear picked up another load of propane to fill their tanks, and Ben, Elizabeth, and Nancy each drove back a diesel pickup that they'd be better off driving instead of the dedicated maintenance trucks. They found so many abandoned ranches that it could take them weeks to strip all the useable stuff from them. They both came home with full trailers, but they could have used the 18-wheeler. They unloaded everything into the storage rooms for now, ate dinner and went home to their own houses to go to bed.

Chapter 30

*** Later that evening, near Grass Valley ***

When their mom didn't come back for them, Abby decided that if they were going to eat, she'd have find something to feed Mikey. She looked up and found a box of cereal on shelf but couldn't reach it at first. Looking around, she spotted a plastic milk crate, and carried it over to the shelf. It was a big step for her, and she barely made it. Eventually she managed to grab the cereal box without dumping the contents, then carefully jumped down off the milk crate and set the box on the table. She remembered where her mom put the bowls and spoons, and walked over to the cabinet. The bowls were too high, so she dragged the milk crate over and climbed up again, and managed to get the cabinet door open. She took two bowls out, left the door open and set the bowls on the counter and jumped down, then carried the bowls to the table.

She remembered she needed spoons, and was barely able to reach the silverware drawer, and almost cut her hand on a knife in the drawer. After she set the spoons on the table, she remembered her mom always added milk to the cereal, and opened the small refrigerator to take out the last of the powered milk. She called Mikey over, then filled his bowl to overflowing with cereal, but was more careful with the milk, and managed to get almost all of it in the bowl. Mikey could barely see over the table top sitting in the adult chair, so she picked up the phone book they had been using for a booster chair, set it on the chair and helped Mikey up. After dinner, she took out some toys for Mikey, and spotted her favorite doll. Forgetting all about the mess they left behind, they played with their toys until they fell asleep on the floor.

The awoke the next day when Abby needed to go to the bathroom. When she was finished, she helped Mikey, who was potty trained, but needed help pulling up his pants. They washed their hands like their mom had taught them, then Abby realized she was hungry, and there was no milk. Instead of crying, she sat Mikey on the floor next to his toys, and shared the rest of the box of cereal right out of the box. Abby was getting more and more alarmed and didn't know where her mom was, but was too preoccupied with taking care of Mikey to give it much thought.

*** The next morning, Angeles National Forest, CA ***

After breakfast, Bret called everyone on the radio and said they had some more scavenging to do. Once they all assembled, they decided which vehicles they would need. Bret suggested the deuce with the M -60, 18-wheeler, both Dodge Ramchargers pulling trailers, and everyone else pile into their diesel trucks to pull trailers if needed. Jeremy, Gloria and Natalie stayed behind again, and once everyone was geared up, they piled into the vehicles and drove down the fire road to the first house on Bret's list. With all the help and the trailers available, the ranch was quickly stripped of anything useful, and they drove on to the next one. 3 ranches later, the

trailers were full, and they had located 2 towable fuel tanks. Once they emptied their loot, they decided to make another trip, and emptied 3 more ranches before nightfall. Once they emptied everything, they sat down to dinner at Bret's house, where he gave them the good news that at this rate, it would only take them a week to clear out the ranches, then they needed to take a week to chop and store enough wood to replace what they burned, with some extra for the houses that had fireplaces. A chorus of groans arose from the table, until Bret quoted Marcincko's 6th Rule of SpecWar: "Thou hast not to like it - thou hast just to do it." Leroy glared at Bret thinking "No Fair using Marcinko to remind me I'm getting soft in my old age." Finally Leroy stood and said "Alright ladies, you heard the Boss! Assemble at 0800 tomorrow for scavenging duty, that is all!"

Allen, being a proverbial Smart-Ass said "What about us?"

"Oh, I got something really special for you!"

Allen's grin changed to a look of horror when it dawned on him what Leroy had said, and the implications of that idea. He imagined cleaning out stalls by hand or worse. Naturally, Leroy did nothing to disabuse Allen of what horrible fate he had in store for him. Finally everyone went home to go to bed.

The next morning Allen walked up to Leroy like a man headed to his execution. "Ok Leroy, what do you want me to do?"

"Get up in the deuce and drive while I man the machine gun."

Allen ran to the deuce like a man who had just received a reprieve from the gallows, and climbed aboard before Leroy could change his mind. He saw his vest, LBV, and E&E kit sitting on the seat next to him, and he quickly jumped out, put them on, then climbed back in. Minutes later, Leroy climbed in next to him. "So you learned your lesson?"

"Sorry about the smart-Alec comment Leroy!"

"I thought so - did you get any sleep last night?"

"Not much, I dreamt you had assigned me to several horrible details overnight, one after the other, and each worse than the last."

"Son, you would have made a good Marine, I've got to teach you and Ricky, and the rest of the Explorers everything I know while I can. That means you need to wise up and pay attention. Your first lesson was not to smart-mouth the Sergeant, they can make your life a living hell. Second lesson, never call a Sergeant "Sir" - we work for a living. I've got some books and manuals I want you and Ricky to read as soon as you can. When you're finished, I'll run you

through some field exercises and teach all of you how to think like Marines. I've got a bad feeling things are only going to get worse from here on out, and the country is never going to be the same as it was before."

"I know, I get that feeling too Leroy."

Leroy picked up the microphone and said "Let's load 'em up and move 'em out." 2 minutes later, he heard the noise of diesel engines starting, and Allen started the deuce as well. Leroy turned to Allen and said "Well, what you waiting for, let's go." Allen put the truck in gear and pushed the throttle, and they were rolling forward. Half an hour later, they arrived at their first destination and quickly loaded everything they found into the trailers, then moved on. Their best score that day was dozens of cases of long-term storage foods, and a well-stocked armory and pantry. One ranch must have been populated by a dozen women judging by the supply of TP and feminine products they had in storage. Maggie was overjoyed when she saw how much they were taking out of that 1 ranch, now their supply wasn't so critical. Another ranch must have been anticipating having 10 kids in diapers judging by the huge boxes full of cloth reusable diapers, shock-it bleach and laundry soap they had in stock. They even had a handcrank operated wringer attached to a huge wash tub with a washing board. Allen wisely zipped his lip, and kept his comments to himself. Over the next several days, they scavenged enough food and supplies to last everyone at least 10 years without growing more. Bret made sure they checked for horse troughs and other stuff they could use to make more aquiculture setups now that they had the room and the fuel. They located over a dozen horse troughs, and finally found some plant trays that could be adapted to use as hydroponic trays with some fiberglass screening in the bottom to fill in the holes. Bret had hoped to find some deeper trays, but at this point, he was willing to take anything he could use to increase their production.

Finally they made their way back to the road Jerry's place was on, which also happened to be the last road headed into the valley that they knew contained mostly abandoned houses. They cleaned out Jerry's place, made contact with several ranchers who had helped Ricky's Explorers, and offered them any help they could. They could all use some diesel fuel, so the next day, Bear drove the fuel truck to the mine, and filled their diesel tanks for them, then filled all the diesel tanks in their rapidly growing community. Finally he made a trip back to the mine, filled the tanker again, and parked it in the garage with their emergency supply of diesel. It took them a week to store then divvy up everything they scavenged. Everyone decided to store enough food and supplies for 90 days in each house, and store the bulk of the stuff in Bret's house and the shelter, which wasn't being used anymore for housing.

The next day, Bret told them they needed to locate a stand of trees, hopefully something nearby and big enough to provide at least 50 cords of wood - that meant about a couple of acres or more. Ricky spoke up, and said he remembered a stand of small trees up the road where they were scavenging the other day. Bret had him point it out on a map, and decided that they'd do

this the way they did it last time, cut the trees down, top and limb them, and haul the logs back to Bret's place to be split and stacked. Kelly remembered something, and told Bret the mine might have a grapple implement for their big loader, it might be a bit on the big side, but being able to pick up a 30-foot tree and lay it on a trailer would definitely speed things up. Bret asked Moose if he minded going up to the mine with Kelly and looking around while they located the stand of trees and cleared the brush.

They agreed, and Kelly quickly located the wheeled loader, and then the material handling forks the mine got to quickly move large telephone poles and huge pipes around the mine. While Kelly got the loader started, Brad removed the pins holding the rock bucket onto the loader, then Kelly backed up and pulled forward to the forks. Brad connected the pins after saying a few choice words he was thankful Kelly couldn't hear over the growl of the diesel. Finally they got the forks connected and tested, and Kelly drove the loader onto the lowboy they had used last time while Brad got the tractor started. With the engine idling, he hopped out and helped Kelly chain down the monster wheeled loader, then gave her a hug and kiss, and said he'd drive the tractor back to Bret's place, and she could drive their truck. She got in their pickup and followed Brad out the gate, then hopped out and closed the gate and wrapped the chain over the gate, and connected the lock to the chain so it looked locked from a distance, then drove off to catch up with her husband.

When they got close, Brad called on the FRS radio, and got directions to where they were cutting the trees, then had the idea of using the lowboy to haul trees while the loader piled them onto the loader. The lowboy could haul 10 times as many trees as any of their trucks or trailers could. Bret thought it was an excellent idea, and told Brad where to park.

*** That same day, near Roseburg, OR ***

Jodi woke up in a strange room again, but this time didn't feel like crying. She hugged Paul, rolled out of bed, got dressed and went to make breakfast for everyone. After breakfast, they cleaned the house from top to bottom, then Paul asked Jodi if they could go shooting. She knew Allen and Adrian were way too young, but didn't want to risk breaking up the family, so she suggested she stay in the truck with them. Paul pointed out that Jodi needed practice too, at which point Nicole volunteered to watch "the little brats" while mom got some practice. Jodi had to laugh, because Allen and Adrian were definitely living up to Nicole's nickname for them today. Paul, Nicole and Robbie carried their rifles into the bed of the truck while Jodi strapped Allen and Adrian into their seats. She felt like using duct tape today, but restrained herself. Paul knew where an old shooting range used to be before Fish and Game shut it down, and drove to it carefully. Once they got there, Paul told everyone to be quiet, and he listened for any man-made noises. All he heard was natural sounds like the birds, etc. Once he was sure the coast was clear, he set up 4 targets at 100 yards, figuring that anything outside of 100 yards with their rifles using open sights would be a waste of ammo. Nicole and Robbie made up 4 shooting positions using tarps and sleeping pads. When Paul came back, they all put their eyes

and ears on while Jodi stayed in the truck with the kids. After an hour or so, Nicole got up and switched places with her mom, carrying a roll of duct tape just in case. Later that afternoon, Paul pulled their targets, and was pleased that Nicole's best group was a 3-inch group, and even Jodi managed to shoot a 4-inch group as rusty as she was. When they were finished, they policed the area, gathered all their spent brass to reload using Dennis' reloading equipment, and headed home.

*** That same day, Winnemucca, NV ***

Right after breakfast, Herbert heard a request on the radio for all doctors and nurses to report to the Community Hospital, there had been a bad accident and fire at a mine, and they needed all the help they could get. Martha heard the radio and said "I've got to go - even if I'm retired, I can still help out. Could you please drive me?"

Herbert said yes in a heartbeat - Martha was driving him stir-crazy with her incessant cleaning, and she needed something to do. She grabbed her old bag that contained 2 spare nurses uniforms and everything she'd need for a week at the hospital, and they got in the truck. They were stopped at a roadblock by a Sheriff's deputy near the hospital, and Martha had to show her ID to get past the roadblock. When she checked in on the floor, the Nurse's supervisor said "Aren't you a little old for this Martha?"

"They said they needed everyone on the radio. I might be rusty, but I can still help."

"I hate to say this but your license lapsed years ago. Even still, we can use the help, but no unsupervised procedures, OK?"

"Thanks Maggie. Where can I get changed?"

"Nurse's lounge is right where it's always been."

Martha came back 20 minutes later in her old nurse's uniform, and checked in. Maggie handed her a badge with her name on it, and a yellow stripe denoting an unlicensed but trained volunteer. Realizing that Maggie didn't even have to let her back on the floor, she thanked her and pinned the badge on again right as some firefighters rushed through the doors with several burn victims. Maggie started directing traffic and Martha went with one of the burn victims into Room 3. She put on a mask and gown, then carefully cut away all the burned clothing and prepped him for the doctors. She hopped someone would hurry, this young man was horribly burned and needed immediate care to save his life. He was already intubated and had 2 IV's hanging, 1 of Ringers, and 1 of D5W. She looked on the chart, and he had already been given Morphine in the field, so she knew he was in a bad way. Judging by the amount of burned and charred skin, she knew it would take heroic measures to save his life, and numerous skin grafts, assuming he hadn't burned his lungs or inhaled too much smoke. If they could get a chopper in

here, they would probably be evacuated to Reno or Salt Lake where a major trauma hospital with a burn unit could take over. Martha didn't know it, but as she thought it, a Marine Chinook was being prepped at NAS Fallon to fly to Winnemucca and take an expected 20 critically burned miners to the Burn Center in Salt Lake City. While she waited, she held the man's hand and prayed.

Chapter 31

***One Week later, near Grass Valley ***

Abby and her brother had run out of food, the refrigerator was empty, and she couldn't reach the rest of the cereal boxes on the top shelf, even standing on the milk crate and the phone book. She even tried the chair and the phone book, but fell and hit her head. She lay crying for several hours, while Mikey was bawling his head off, he was hungry and didn't know why his "big sister" was crying. "Mommy" always came and comforted them when they cried. Eventually they cried themselves to sleep, and woke up later that afternoon still hungry. Looking on the same shelf the cereal was on, Abby spotted something Mom fed them for breakfast. She couldn't read the box, but it was oatmeal. She climbed up on the milk crate, grabbed the box, and climbed back down then set it on the counter next to the stove.

She remembered her mom taking a pot out from under the stove and putting water and oatmeal in it, but didn't remember how much of each. She dragged the crate over to the sink, filled the pot about half full, slid the much heavier pot closer to the stove, climbed down, and repeated the process 3 times until she had the pot on the burner. Next she climbed down, got the oatmeal, filled the pot the rest of the way, then opened the drawer where the silverware was. She got a big spoon and began to stir the oatmeal like her mom did. She was afraid of the stove because her Mom had said repeatedly "Don't touch, you'll get burned" but her hunger was greater than her fear. She got Mikey playing with his toys on the far side of the kitchen, as far away from the stove as possible, but where he could still see her.

She tried all the knobs, and eventually got the fire below the pot, and started stirring. Half an hour later, the bottom of the oatmeal was stuck to the pot, and starting to burn, and she couldn't stir it anymore, so she turned off the heat, and climbed down to get two bowls. She filled them full of the gelatinous goop, leaving most of it stuck to the pot and carried one bowl at a time to the table, along with spoons for both of them. Finally she put the phone book on Mikey's chair, and they sat down to eat. The oatmeal tasted horrible, but it was edible, and as hungry as they were, they cleaned their bowls.

*** That same morning, near Bret's House ***

The first stand of trees was smaller than they had hoped, but it gave them good practice using the mill yard forks on the loader, and the Bobcat to drag the tree tops away from the trees once they were down. Kelly quickly stacked all 30 trees onto the lowboy, and Brad got them chained down and drove them back to Bret's house. They used long ropes to release the chains, and using both splitters, and all their gas saws, they quickly sawed the wood to length, and split it. Since they had so many people available, they used manual labor, or "Manuel

Labor" as Ricky quipped, to load the pickup trucks, and drive the wood over to the wood pile and stack it. Brad drove the fuel truck back to the mine for another load of diesel, and spotted another grove of lodgepole pines about as large as the last one. He knew the ranch that owned the trees was abandoned because he helped scavenge everything that wasn't nailed down from it a couple of weeks ago. He made a quick call on the CB, and they drove everything they would need to log the grove over there, and started clearing brush. Once they started logging, it only took a day or so to fell all the trees in the grove and top them. Allen dragged the tops out of the way, then pulled the logs to a spot closer to the low-boy where Kelly loaded them onto the trailer. It took 2 loads to get all the wood back to Bret's house, where they started the process of cutting, splitting, and stacking all over again. This time, each house that had a fireplace got a pickup bed full of wood.

When they had distributed the wood, Bret brought out 2 6-packs from his dwindling supply of beer and they sat on the porch. Moose counted noses, and realized there wasn't enough beer for him to have 3 to himself, so he nursed his 1 beer. Bret stunned Allen and Ricky by handing them a beer, and telling them to sit down. Ricky said "Thanks Bret, but I'm not 21!"

"Ricky, age is just a number. You and Allen have been acting like adults, and taking on adult responsibilities since you got here. We don't have enough beer for anyone to get drunk, so I felt it was time to let you enjoy the rest of your adult privileges. Bear, Moose, and I just sat out here by ourselves after a long task and just shot the breeze sipping our beer until now. Soon you guys will be running things as we get older, so I wanted to include you in everything from now on.

You might have thought I was being a slavedriver by insisting that we replenish our stock of wood, but I've got a gut feeling this is just the current round of disasters, and if my information's accurate, some time in the next year or so, Yellowstone will let go, and we'll be back in the shelter for over a year until the ash stops falling. We're way west of Yellowstone, but even as west as we are, we could still get up to a foot, and the atmosphere will be so saturated with ash that noon will appear to be dawn or dusk, which means nothing will grow outside until the sky clears years later. Carl Sagan wrote an article in Science Magazine about Global Winter. You noticed that it got colder around here after the Long Valley erupted, well the effects of Yellowstone erupting on the atmosphere will be at least 10 times worse.

The next project we need to do is to get every square foot of plantable space around here planted with vegetables and fruit if we have enough time, and grow everything we can, then we need to can everything and store it. Also, we need to save the seeds since they are non-hybrid seeds, and the next year's crop will grow from saved seeds. I'm going to expand our aquiculture setup with the extra water troughs, and hopefully double our production so I can freeze the Tilapia fillets and store them in case we need them later. Moose, we need you to build some more worm racks and find a way to double your worm production, or better yet quadruple it, and we can use the extra humus to amend the soil around here with. We can feed

your worms all the scraps from the gardens, so they'll have plenty to eat."

"Ok Bret, I can do that easily. Hopefully you've got some extra building supplies in storage."

"Tell me what you need, and we'll load it in your pickup."

"Ok, Bret, I'll let you know."

"Now where was I - Right, you guys might have to fall back to 1800's technology when we run out of diesel. Luckily we stripped Jerry's yard bare of all his steam engines, and hopefully we can build tractors and stuff out of the steam engines to help you farm. While we've got diesel, you need to think of any projects you need heavy equipment for, and we'll get it done while we have the fuel. After Yellowstone, we'll probably be the only surviving families around here unless the ranchers make it."

"Dad, is there anything we can do to help them make it without jeopardizing our own survival?"

"Good question, never thought much about it. Giving them more diesel is a short-term solution, but they might be able to use it to produce more food, and that might help them. I really don't want to give them any seeds, since we need all the ones we've got now to plant every square foot we can. Any other supplies we have, I really think we should keep."

"How about the Tilapia and worms setup. I remember some of them had solar panels on their roofs."

"That will only work as long as the sun shines. Once it get's cloudy out, their solar panels won't work, and they'll be forced to burn diesel in their generators. I don't know if those mine tanks have enough fuel to get them through the long darkness."

"Can we build steam generators for them like we use? If they've got a supply of wood, they can heat their houses and make electricity too."

"Son, we've got the smallest steam engine Jerry had - they'd need a huge Quonset hut just to store it in, plus the concrete to build the hut, and the heavy equipment to build it with."

"Could we at least check? If they survived, we would eventually form a larger community, and I'd rather be on their good side than have to fight them later."

"Ok, Ricky since you've met most of these people, would you mind making a trip with me tomorrow, and see what we can do to help these people?"

"Sure Bret, that sounds like a good idea."

The next morning, Bret and Ricky drove Babe to the ranches who had helped the Explorer Scouts. Ricky explained who they were, and what they were thinking about doing. Then he introduced Bret, who told the ranchers that the nearby mine had some resources that they could use to improve their chances to survive. Some of them didn't believe that Yellowstone would erupt, but were still interested in what Bret had to say. When he mentioned steam generators, one of the ranchers said that the mine had several 100KW generators that could be set up to run on diesel, with the possibility of running them on steam later, since they used an external pulley drive system instead of a direct drive unit. He volunteered to take a trip with Bret and Ricky and show them were some more stuff was that might come in handy. They jumped in his ranch truck, and half an hour later, Bret opened the gate, and they drove through. Bret pretended he unlocked the gate just in case. They drove up to a distant part of the mine that looked like a warehouse, and inside was all kinds of parts and equipment the mine used and repaired and then stored until they needed it later.

Sure enough there were 4 trailer-mounted generators and rolls of power cable. Bret took a close look, and it would be fairly easily to retrofit them to steam power. Bret told the rancher about their setup to combine propane and wood-burning to make steam. He told Bret that they could use a bunch of propane too, and knew where there were some huge tanks located on the mine for heating and their propane-powered vehicles they needed for the underground portion of the mine. That got Bret's immediate attention. If they had some 5-10,000 gallon tanks, if they could off-load the propane, and put the tank on a lowboy, they could park the tank anywhere. Bret asked him if they knew where some more Quonset huts or big Conex boxes were that would be big enough to hold the steam engine and propane tank, plus a huge supply of wood. Carl looked at him kind of funny, and Bret said if this was going to work, they needed over 100 cords of wood, and 2-5 thousand gallons of propane to last 5 years. Bret explained Carl Sagan's "Nuclear Winter" scenario also applied to massive volcanic eruptions that threw tons of debris into the atmosphere, and it could easily take 5 years for the atmosphere to clear enough for their solar panels to work again. That got Carl's attention, and he as all ears.

Bret outlined his long-term survival plans for his community, and Carl agreed there was strength in numbers. He had some young daughters that would need husbands, and he knew other ranchers with kids too. Bret and Carl shook hands and agreed to work together. Bret asked how they were set for self-defense, and Carl admitted "not well enough, just some rifles, shotguns, and stuff." Bret said they had some surplus rifles and ammo they might be able to trade for stuff they needed. Carl suggested a CB frequency they could talk on from now on, to save diesel. Bret said they could come back with a steam engine that could power their 100KW generator if the 4 nearby ranchers could get together and erect a Quonset hut to store it, a 5 thousand gallon propane tank, and 100 cords of wood. Bret said he'd call him when the steam engine was ready, and suggested if they needed help learning how to run the mine's heavy

equipment to call him, since they had some experience with building an earth-sheltered Quonset hut with the mine's equipment. Carl smiled, he knew where the mine's equipment went that one day when his buddy Earl saw it driving down the road. He thought "These guys are the answer to a prayer." He asked Bret if they might be able to exchange labor for their help getting the Quonset hut up and buried. Bret admitted they didn't know much about planting large gardens, they had all the equipment, but lacked the expertise. Carl chuckled and said "Well, I'll tell you pilgrim, we've been planting what you'd probably be calling a truck farm for generations on our property. We used to raise cattle, but the small producer market went bust years ago, and now we were making a living selling Organic produce to the local markets for the last 20 years."

Now it was Bret's turn to smile, putting up a Quonset hut and backfilling it was a walk in the park for them. Carl's information on Organic Farming techniques could double or triple their output. They drove back to Carl's ranch, and contacted the 4 other ranch families around him, who agreed to share the output of a 100KW steam-powered generator, and decided to locate it equidistant from their 4 ranch houses. Bret realized they had enough cable easily to do it, and the generator was a 220 Volt AC generator, which would work great with their grid-intertie inverters. Bret's group would help them install the Quonset hut, steam generator and the power system, and they in turn would help them dig, plant, and maintain as many organic gardens as they wanted. Bret told them they could start disassembling and moving the Quonset hut tomorrow, and they needed to prep the site by clearing and leveling, then compacting the land, and digging footings for the embedded bolts needed to secure the Quonset hut. They didn't have the materials or know-how to build a concrete floor. Carl told Bret where the mine had a huge stock of bagged concrete mix and aggregate for their batch plant.

Bret mentally smacked himself, thinking, "of course, if they've got several concrete pumpers, they would have a batch plant on site - they already have all the sand and aggregate they could ever use as a by-product of mining. Sometimes I think I just use my head for a hatrack." Carl said they'd take care of the footings and floor, all they needed was the dimensions and bolt placement for the Quonset hut. Bret said they could solve that problem if he had a surveyor's tape, and were willing to take another trip to the mine. Carl grabbed his surveyor's tape, and they were out in the truck a minute later. They located a suitable Quonset hut, and measured it. It was 120 by 60 feet, and Bret noted the bolt spacing while Carl measured the length and width. There was an embedded bolt every 18 inches, just like the other ones they installed. Carl measured the distance from the front of the Quonset hut to the first bolt emplacement, and the distance from the first bolt to the back of the hut, and the placement along both ends. With the needed figures, they drove back to Carl's ranch, where Carl shook Bret's hand and told him he'd call him when they were ready for the Quonset hut. Bret said they needed the embedded bolts, or they needed to locate enough 1x 12 bolts to embed them themselves. They could scavenge bolts from the existing hut as they took it down, but Carl suggested the mine should have plenty of 1x12 bolts and nuts in stock, so they'd use fresh bolts, and save the labor of extracting the embedded bolts. Bret smacked himself again when he remembered that's exactly what they did - once the bolts were embedded, they'd need a jackhammer to get them out!

All of a sudden Bret stopped dead in his tracks and turned around to face Carl "How well would your houses survive over a foot of ash, and 5-10 years of possibly freezing cold weather?"

"Not very good I'm afraid. The roof was creaking and groaning with 6 inches of wet ash on it until I got up the nerve to clear it off."

"We could park another Quonset hut next to the other one, and earth-shelter both of them. You could use the second one as a shelter. A 120x60 Quonset is big enough for 2 stories and about 10,000 square feet of usable space if you have the materials to build a second floor, or 7,000 square feet on 1 floor. The earth-sheltered Quonset would be easier to keep warm, and it could handle 10 times as much ash as your house could. We'd be more than willing to put the second Quonset up next to the first. You could use it for storage if Yellowstone doesn't erupt, and if it does, you'll have some easily heated living space for the 4 families. It will be cramped, but at least you'll be alive. Once the ash stops falling, you'll be able to go outside and do stuff, but you'll want to sleep in the shelter for safety."

"Sounds like an idea Bret, let me talk to the other families and we'll let you know."

The next day Carl called Bret "I talked to the other ranchers, and they said the mine has plenty of structural steel and decking, and two of them are certified welders. I think the 2-story option might be better."

"I agree Carl - you could make the kids rooms on top, and leave more room on the bottom, and still have tons of space for everything. You'll have about 7,000 square feet on the bottom, and another 3,000 square feet on the second floor. If none of you are over 6 foot, you could put all the bedrooms on the top floor with an 8-foot clearance, leaving a large area underneath for storage and living space. That reminds me, do you know anything about aquiculture?"

"I've heard the word before, but can't recall exactly."

"What would you do if I told you that you could raise fish and vegetables in an indoor greenhouse using the excess heat and power from the steam generator, and some florescent lights."

"What kind of fish, catfish?"

"Actually Tilapia work better, they're a fast-growing tropical fresh-water fish from the Amazon that go from fry to 2-pounds in 6 months if you can maintain 80 degree water and keep them fed."

"What do you feed them?"

"Mostly plant scraps from the hydroponic system. You know it would be quicker to show you my system than to explain it. I'll come over and get you, introduce you around, and show you our setup all at once."

"Ok, I'll be waiting - Thanks Bret!"

An hour later, Bret pulled up to Carl's ranch house with Babe, and Carl jumped in, buckled his seat belt, then asked Bret what kind of vehicle they were in.

"It's a purpose-built rock crawler. My friend and I built it years ago just to prove a point that a 2-liter turbocharged diesel engine would work as the powerplant for a dedicated Class 4 rock crawler."

"By Class 4, I'm assuming that this is a long-bed pickup style roll-frame."

"Exactly, you must have been into off-road racing?"

"Nope, just what I saw on ESPN. It looked like fun though. I don't know about crawling over huge boulders, that sounds dangerous."

"It can be - we haven't had any deaths in years, but every now and then someone will get hurt in a roll-over. I've never heard about anyone going over a cliff in an organized run because they're so safety conscious. I've got the fenders on now, but with them off, Babe can score over 800 on the RTI."

"What's the RTI?"

"Sorry, that stands for Ramp Travel Index, or how far a vehicle can travel up a 20-degree front-wheel ramp without picking up the rear wheel divided by the wheelbase."

"So Babe's pretty flexible?"

"She's exceptionally flexible for a solid axle vehicle."

"Ok, glad we're on a regular road, I'd rather not have to find out just how flexible Babe is -thank you!"

Bret laughed, started the truck, and drove home.

Once he drove up the fire road, Carl spotted something, and almost choked. Finally he

sputtered "Was that a Claymore mine back there?"

"Guess we need to do a better job camouflaging them!"

"What in tarnation do you need them for?"

"We've already been attacked once by a bunch of MZB's."

"What the heck are MZB's?"

Bret laughed and said "that stands for Mutant Zombie Bikers, the main characters of the 50's B-movies where the bikers attack the good townspeople."

"OK, I remember now. In that case, I guess it was a good thing you had them."

"Yeah, 1 blast of 4 claymores shredded almost a dozen MZB's. We didn't even need to shoot them."

"I wish we could get our hands on some!"

"If we've got any explosives left from this project, you might be able to make a close copy of the Claymore. You'll need to locate some more C-4, because dynamite won't work, it needs to be compressed between 2 steel plates, and the outer plate has to be covered with steel ball bearing stuck in epoxy. Good news is the mine has plenty of electrical detonators left, and we'll try to save a couple if you want to build some. What might be a better idea for your area would be some command-detonated cannons firing shrapnel charges that would cover a wider area, and have more range to protect the entire roadway up to your place. Our fire road is much narrower than your road, and they're forced to come up the road due to the deep forest on 1 side, and the bank on the other. If you used Claymores to protect your road, they could walk around them, or they could be out of lethal range."

"Ok, the mine has plenty of 12 inch gas pipe that will work, and I'm sure ANFO will work as well as Black Powder as a propellant."

"Especially if you use a 1/4 stick of dynamite as an initiator charge!"

By the time they got to Bret's house, Carl understood exactly what Bret meant by an "Earth-Sheltered House." All 3 Quonset huts were covered in dirt. Bret explained that his initial house was bored in, and the other 2 were excavated and back filled. Carl asked him why they didn't just excavate all 3 and backfill them.

"I did the house first, and we just did the other 3 last year. We didn't have the equipment to

bore it, so we decided to take the dirt off, build the Quonset huts, and backfill. Looking closely, Carl noticed the bigger door in the middle wasn't the kind of entrance you'd find in a Quonset hut. They walked over to that door first, and Bret said that it was their main house. He wanted to show it to Carl because it was the only 2-story building, and they had a masonry heater stove they might want to copy. He was amazed at the size of the interior, and after he was introduced to everyone, they went next door to check out the "steam room" where they had the steam generator, and Bret's greatly enlarged worm farm/Tilapia/hydroponic set-up. Bret explained how everything worked, and Carl made the same comment Brad did "You mean you eat fish poop?"

Bret shook his head, then explained "The plants use the nutrients in the water just like they use the nutrients in soil, except we don't need soil so we can plant them much denser than you can in soil. By the time the water passes through all those plants, it's cleaner than any filter could make it. If you combine warm and cool 48-inch florescent tubes in the same fixture, it's close enough to normal daylight that plants thrive, and it uses 1/10th the power of conventional incandescent grow lights. We used these 10-foot horse troughs as basins for the hydroponic solution, and if you have any planting trays, especially deep ones, you can line them with fiberglass hardware cloth and use them as planting trays for the hydroponic media. There's just 1 problem - I'm out of media, and don't know where to get any more."

Carl stuck his hand in one of the trays, and pulled out a handful of hydroponic media. "That's just pearlite, I know where we can get a bunch - there's a lawn and garden center in Wrightwood, and I'm pretty sure they've got tons of the stuff."

"Well if that's the case, maybe we should drive over there and get as much as we can."

"Maybe we should go now while we can, and you can drop me off at my ranch on the way back."

Since his Ram Charger could haul way more than Babe, he connected a flatbed utility trailer to his Ram Charger, and drove to Wrightwood, following Carl's directions. They drove around the back of the garden center, and there several pallets full of Pearlite, and a bunch of other stuff. They found a pallet jack after some searching, dropped the ramp on the utility trailer, and pushed the pallets of Pearlite up onto the trailer and secured it. Bret locked the ramps back up, and they drove off. When they got to Carl's ranch, Bret helped him unload a pallet of Pearlite, then he drove back home while it was still light. Even after giving Carl half the haul, he had enough to double his production again if he wanted to expand his production. He stored the Pearlite and set it aside to do it later - they had to build 2 huge Quonset huts and build as many gardens as they could first.

Chapter 32

*** 1 Week later, near Winnemucca, NV ***

Martha woke up in her own bed, and laid there, remembering the last couple of weeks at the hospital. Horribly burned men were screaming and yelling in pain, yet the young man she sat with and prayed over never made a sound. She was grateful he was mercifully unconscious, and she stayed with him until the attendants came to get him for the helicopter ride to Salt Lake City. She cried when he went through the doors onto the chopper. Maggie gently hugged her and said "He should be OK, he made it this far. Thanks for staying with him. I've got another patient that needs some TLC, but he's conscious, and an ornery old cuss."

"Sounds like Herbert, I can handle him!"

"That's the spirit Martha, Room 4."

She walked into the room, and the sight of a man covered from head to toe in bandages, splints, and IV's brought back old memories of when she worked Trauma at Reno General. She quietly walked in, sat down and asked "Mind if I pray for you?"

"Go ahead Sister, I need all the help I can get!" rasped the patient from his burned lips. Martha crossed herself, and started praying. As she prayed, she reached over and covered his bandaged hand with hers. Halfway through, she could tell he was having difficulty breathing, then his eyes rolled back and he was unconscious. She asked him "Are you OK?" and hearing no response, pinched his hand, then checked his pulse. When he didn't respond to the hard pinch, she checked his pulse at his neck, and finding none, she hit the "Code" alarm, went out to the hall, and not seeing anyone, hurried back inside, started CPR and bagged the patient.

Every minute seemed to be an eternity, finally after 5 minutes, a harried looking ER doc and an attendant pushing the code cart showed up while she was performing CPR. He asked what had happened, and she quickly explained while trying to maintain CPR. He took over CPR while Martha set the defibrillator to 200watt-seconds and handed the paddles to the very junior ER doc. He pressed the paddles to the patient's chest, and read the display. What he saw wasn't good, and yelled "Clear" and pressed the trigger, sending electricity through the patient's chest, and hopefully restarting his heart. While the paddles recharged, he pressed them to the patient again, and said "No Conversion, charging for 240" as soon as he saw the heart rhythm on the monitor. He told Martha to inject the Epinephrine into the IV, and watched the monitor saying "come on - don't die on me!" Seeing no reaction on the Monitor, he asked Martha how long he had been down. When she said he was down for 5 minutes before the doc got there, he realized he might be working on a dead man. Still, he decided to complete the algorithm, and had Martha inject the atropine into the IV while he watched the monitor, with no results.

He decided to attempt cardio-conversion 1 last time, and set the defibrillator to 300 watt-seconds while Martha continued to bag him. Finally when the machine was fully charged, he yelled "Clear" and fired the charge into the patient's body, which practically jumped off the table from the huge jolt of electricity. The doc kept watching the monitor, and seeing a flat line, knew that he'd lost the patient. Frustrated, he yelled "Time" and wrote the time of death on the chart. Reading further, he saw a big huge "DNR" on the chart, and slammed it back onto the bed and stormed out furious that he had wasted all that time on a Expectant patient. When everyone left the room, Martha picked up the dead man's hand, held it to her cheek, and said "goodbye." then covered his face with the sheet while she wiped away a tear.

***Near Grass Valley, that Morning ***

Deputy Ronnie Hicks was making his rounds, checking the river, and didn't see any signs of recent activity near Larry and Melissa's place. He pulled his RHIB into the shore, jumped out and tied the painter to the nearest big log, then yelled "Larry, Melissa, it's Ronnie! Anybody around?" He heard no response, and thought "That's odd" and hiked up to their house, or what was left of it. When he got there, there wasn't anything there, not even the stuff he remembered Larry bringing with him. As he got closer, he saw tire tracks heading North that looked like the wheels of Larry's game carrier. He knew Nick's place was north of theirs, and he was much better prepared. Maybe they went to live at Nick's place. He hiked north until the edge of the clearing to the south of Nick's place. He saw a pickup and two bodies on the ground. He immediately crouched down, grabbed his lapel mike and pressed the PTT. "Deputy Hicks at Nick Carlson's place, 2 down, and an unfamiliar truck in driveway. Can you send backup?"

"Backup unavailable, will dispatch to your 20 as soon as someone is available. Proceed with caution."

"Proceed with Caution... Yeah Right! Just their way of covering their butts if I get mine shot off!" He walked back to his boat, got his scoped M-1a and put on his Level III Raid Vest/LBV and a day bag in case he got stuck there for a while. He slung the rifle over his shoulder and quietly hiked back to his observation spot, took out his binoculars and scanned the entire area for any signs of life. As near as he could tell, he was the only living person within his line of sight. He picked up his stuff, and quickly moved from cover to cover, approaching the bodies. Finally he got close enough to see the faces. He was sure the woman's body was Melissa's at least he thought that was her, the body had started to bloat and stink, but the face was still recognizable. He thought the other body might be Mike, one of the resident hotheads. He wondered where Larry was. As he checked out the crime scene more thoroughly, he saw small footprints around the concrete foundation, but didn't see any kids laying around anywhere. He stood to listen, and heard something. As he held his breath to increase his hearing, he heard it again. Then he cupped his ears, and realized the sound was coming from that pipe sticking out of the ground. He walked over to it, and heard children's voices singing "Jesus Loves Me..!"

He yelled down the pipe, "Is there anyone down there?"

Abby yelled "Help, we're down here."

"Where's here?"

"In the basement silly."

"Is there anyone with you?"

"Just Mikey."

"Who's Mikey?"

"My baby brother. Now are you going to get us out of here, or just ask stupid questions?"

Ronnie had to laugh, Abby had a sense of humor even after being stranded in a basement for at least 2 weeks. He found the entrance, and when he opened the door, the smell of rotten food, dirty clothes, and unwashed bodies was enough to gag a maggot. He reached into his bag, put on his gas mask, then climbed down the stairs. The place was a disaster area, with a sink full of dirty dishes, the kids were filthy, and obviously hadn't had an adult around for at least 2 weeks. He decided to get them back to his house. They never had kids, and he and Sally had always talked about adopting, but never got around to doing it, probably because he was too busy. He carried them outside, and kept them from seeing their mother's body by leading them right to his boat. Ronnie was glad Abby didn't cry, then realized she recognized his uniform. He got on the radio, and updated the dispatcher, and told them he was bringing the two children to his house, at least temporarily.

They were met at the dock by Sally, who took the two kids into her arms and held them while they cried. She said "Let's go home, get you cleaned up and fed. Ronnie's got some work to do, he'll be home later." He whispered in Sally's ear, told her that their parents were probably dead, and they'd have to live with them until they could locate some relatives, if they ever could. He was going back to secure the scene, then bury the bodies and bring back anything the kids might need to survive. Sally and the kids drove back to their house on the hill, and he rode back down the river, took pictures of the crime scene, then called and talked to the Sheriff, who told him the coroner wasn't available, and the scene wouldn't be investigated unless he could locate a suspect, and to go ahead and bury the bodies. It took Ronnie near until dark to dig two graves, slide the bodies in as best as he could, and bury them. He wrote the GPS coordinates of the graves on his report form that would go with the pictures in some file somewhere. He hiked back to his boat, and got back to the dock right before dark. When he came home, Sally had the kids cleaned up and fed. He brought several bags full of clothes for them, and Sally threw them in the washer so they'd have clean clothes tomorrow. She said they

went straight to bed after dinner, they were hungry and tired.

The next morning, Ronnie packed up several boatloads of stuff from Nick's basement that they could use, and located his armory. As an ex-Infantryman, he knew what to do with the hardware, and what it was for. He didn't tell the sheriff about the hardware, which was probably hotter than a pistol, and added it to his armory. It took him almost a week to unload the shelter, and transfer the stuff to his house, and still maintain his coverage of the river. Every time he made a loop of the river, he stopped at Nick's house, and took a boatload of stuff up the river to his house. Their house was high on a hill way above the flood, and the department put in a temporary dock of floating oil drums and plywood until they could come up with something permanent. Once he cleared out Nick's place, he followed the tire track back to their origin, and found Larry's body, and solved the mystery. Next to Larry's body was a box of stuff, and he guessed that Mike had shot Larry, thinking he was a looter, before he got a good look at his face, then gone to Melissa's place to apologize, and had gotten shot for his trouble. Melissa must have shot Mike before she died, and he remembered a rifle-sized bullet hole in her chest, and a smaller one in Mike's chest. He added the new information to his report, and filed it with the Sheriff's department after he buried Larry's body, thinking "case closed".

Wondering why Larry was killed in front of Mike's place, he checked the basement out better, and filled the truck with anything useable. He made several trips over the next week, stocking up everything Abby and Mikey might need to live on. All the adults were dead, so the least he could do was give the kids the best chance to survive whatever happened.

*** 2 weeks earlier, Angeles National Forest ***

Once everyone had agreed that they wanted 2 Quonset huts, they asked Bret if they could get some help preparing the land to take the buildings. He called Brad and Kelly, and asked if they could help the ranchers build 1 huge pad with the bulldozer and anything else they needed. Later that morning, the ranchers were greeted by the sight of a huge bulldozer and a wheeled loader coming down the road from the mine. They scraped the area flat, piled up the extra dirt, rolled over it with the wheeled loader to compact the site, then drove back to the mine. Later that afternoon, the ranchers started staking out the forms, and dug the footings for the Quonset huts and structural steel to support the second floor, then laid the rebar and attached the embedded bolts. Several days later, the ranchers drove up to the mine, started up the batch plant, and drove load after load of 3500psi concrete to the site, filled in the footings first, then poured the floor. Once the concrete had cured, they set the structural steel onto the footings they had built for them, and torqued the embedded bolts tight.

Once the structural steel was in place, they welded and assembled the decking for the second story, then once they were finished, they called Bret saying they were ready for the Quonset huts. Everyone assembled at the mine, and quickly unbolted both buildings, saving the

hardware to reassemble it later. Using the forklifts, they stacked the parts onto several lowboy trailers and drove them over to ranch and reassembled them. The cranes on the maintenance trucks made reassembling it much quicker. They came back the next day and finished the job, drilled the holes for the chimney and vent pipes and installed them, then laid reinforcing mesh over the building, and secured it, then pumped and floated 6 inches of concrete over both buildings. Once the concrete cured, they covered the buildings with 6 feet of dirt for insulation, and also to protect them against fall-out.

When the Quonset hut was completed, Bret and Brad started working on the next smallest steam engine to convert it to powering a generator, and duplicated their original propane burner and control system since they had spares. The cranes on the maintenance trucks were barely able to lift it onto a lowboy, and they towed it to the new rancher's powerhouse, carefully off-loaded and slid it into place, then connected everything. While they had the lowboy handy, they drove up to the mine, located a 10,000 gallon propane tank with dispensing hardware to fill smaller propane tanks, then realizing it was too heavy to lift full, called Bret who drove the propane truck up there, transferred the contents to the big tanks at the propane dealer's lot, and they lifted the empty and much lighter tank easily onto the lowboy, secured it well, then towed it back to the rancher's powerhouse and set it on concrete feet that they brought with them to secure the tank, then Bret refilled the tank as full as he dared, and connected the tank to the steam generator and reinstalled the dispensing hardware in case they needed it.

While they were doing that, the ranchers were digging trenches and laying conduit, then pulling cable to their houses, and connecting the cables to their outside circuit breaker panel in such a way that it wouldn't energize the power lines outside their houses. Bret suggested they only run the steam generator enough to exercise it, and make enough hot water for the Tilapia. He looked over, and spotted 12 horse troughs just like his, a pile of bricks and a bunch of florescent fixtures and a case of warm and cool bulbs. Bret saw that Carl was paying attention. He told them he'd be back after they filled the building with at least 100 cords of wood stacked inside the building, and help them set up the Tilapia ponds and hydroponic setup. Carl asked him if they could get some worms to start their own worm farm. Bret said he'd bring some worms and some Tilapia fry with him. Carl laughed and told him to make sure they were in separate containers, or he might not have any worms by the time he arrived there. Bret got a good laugh, shook Carl's hand, and everyone headed home.

On the way home, Bret asked Bear how much propane he thought was left in the dealer's tanks. Most dealerships used 30,000 gallon tanks, and they had 3 of them for a maximum capacity of 90,000 gallons. He guessed they were about half-full. Bret asked Bear if he saw any other big propane tanks on the mine property, somewhere between 5 and 10 thousand gallons, it wouldn't hurt to have extra storage on site. Bear rolled his eyes and muttered "Why didn't you tell me while we were up there - now we have to send the lowboy and two crane trucks, plus the propane tanker just to move a tank." Bear got the convoy turned around, and they headed to the mine. After looking for over an hour, they located another tank, but it was only a 5,000

gallon tank. Bear actually thought that was better, because it saved him at least 2 hours transferring propane into his truck, into the big tank, back out, and into the storage tank once they moved it. This way they could haul the tank and the propane down to Bret's place, and refill it when they got home. Bear made quick work of offloading the propane in the tank into his truck, probably because there was only 1,000 gallons in it. Once he was full, he told Bret he needed to fill his truck so they could fill the tank, and he drove back to the dealer's yard, and filled his 5,000 gallon tank on his truck the rest of the way. By the time he was finished, they had the tank on the lowboy, and were headed home, so Bear joined the convoy. Bret was glad they had cleared out the garage, and managed to get the 5,000 gallon tank situated in his "tank farm" without too much hassle. Bret and Bear connected it into their system, then Bear filled the tank from his truck. He told Bret that he was dog tired, and they could wait until tomorrow for him to fill the tank on the truck again and park it. They now had 16,000 gallons of propane without the truck and 21,000 with the tanker truck. The ranchers had 10,000 gallons, but it was only being used to power their generator, not for cooking or heating like Bret's system was.

While Bret was busy, the ranchers got a copy of Bret's plans, and started building a huge masonry heater stove in the middle of the Quonset Hut Shelter. They located a huge stand of lodgepole pines, and borrowed the loader with the mill yard forks and the lowboy trailer now that Bret was done with it, and over a period of a month or so, filled the space in the Quonset hut with wood, somewhere between 100 and 120 cords of wood. Carl made a stop at the Garden Center with the Lowboy once they were finished, and loaded several pallets full of stuff they would need for the size of truck gardens they were going to plant. He dropped the load off at Bret's place, and highly suggested collecting as much decomposed and composted horse manure as they could. Bret remembered they had the big backhoe loader and the deuce and a half with a 7-yard dump bed, and they could easily handle hauling as much manure as they would need. He called up Allen, and told him he had horse Manure detail until further notice. Allen wondered what he had done wrong until his Dad explained that Carl told him they'd need a huge pile of composted aged horse manure for their gardens, and since he had the most experience shoveling shit and driving the deuce, he was nominated.

"Gee thanks Dad, talk about a Shit Detail!"

Leroy heard that part of the exchange, and had to laugh, then told Allen it could be worse - he might have to shovel it by hand instead of using the backhoe loader. Allen clammed up when he remembered the last time he smart-mouthed Leroy. Leroy thought "The boy's finally learning!" Allen took the deuce and the trailer with the backhoe loader around to all the abandoned ranches that had horses, and loaded their piles of horse manure into the deuce, and drove each truckload over to their community, and dumped the load in an unused lot so no one else would have to enjoy the smell. Veronica made him take 2 showers each night just to get the smell off. When he was finished, he told his dad that he had discovered a new form of Birth Control. Shoveling manure and the aroma thereof wasn't conducive to lovemaking. Bret laughed and said he'd have to remember that if they ever had a population explosion.

Chapter 33

When Allen finished hauling 10 truckloads of manure, Carl showed up, and told them what they needed to know about Organic Farming using no or low-till techniques, how to evaluate their soil, and crop planting and rotation techniques to get the most out of their soil without artificial fertilizers and pesticides. He told them about companion planting, and natural plant pesticides. Finally he showed them how to till in the manure and till planting rows into the soil without disturbing the topsoil any more than they had to. They all pitched in, and soon they had the first 5 acres planted. Several weeks later, they had over 15 acres planted and set up for irrigation. Once the seedlings started sprouting, Carl came back, and showed them how to properly thin the plants, removing the weak ones, and leaving the strong. Every week, they weeded their gardens, and watered daily during the heat of the summer to keep the plants properly hydrated. By the end of summer, they had a bumper crop of vegetables, and started canning as fast as they could. Their scavenging efforts had paid off, with over 200 cases (6 boxes of 10 jars per case) of quart canning jars with lids and rings, and dozens of 12-quart canners. Every house was turned into a canning factory, and they put up 3/4 of their produce, froze some of it for short-term storage, and ate the rest fresh. They managed to use almost 3/4 of their available jars and lids. Everyone stored 90 days worth of canned vegetables at their houses, and stored the rest in Bret's basement storage, which was starting to get crowded, even with the Tilapia relocated to the Steam Room.

Carl and his group of ranchers started scavenging abandoned ranches and stores in Wrightwood to locate fixtures, hardware and building materials to finish the inside of their Quonset hut shelter. They decided to have 4 master suites, and 4 kids rooms with bunk beds. They'd have 2 rooms for the boys, and 2 for the girls, segregated by age. Carl knew teenage girls didn't want to sleep in the same room as their 8-year old sisters or their friends. They had 4 bathrooms for the kids, and 2 had bath/shower setups to give the little kids a bath. They erected standard frame 2x6 walls to separate the bedrooms, and made sure they were well-insulated for noise suppression. Downstairs was a storage room, the Kitchen which was built around the massive masonry heater stove and cooktop, with the cooktop in the kitchen, and the hearth facing the living room. There were 2 bathrooms downstairs for convenience, but they were very small with just a toilet, sink, and small shower stall. Carl copied Bret's idea for steel shutters over the windows, and the door would stop a 30-caliber round cold. They still had to tend their truck gardens and livestock, so they didn't get much sleep.

***Near Grass Valley, CA later that week ***

Abby and Mikey had adjusted to living with Sally and Ronnie as well as possible. Abby occasionally would exhibit infantile behaviors, but over time, she sucked her thumb when she slept less and less. She had come to terms with the death of her parents, even if she didn't understand. Mikey was too young to understand, and fairly quickly adopted Sally as

"Mommy". Ronnie and Sally loved them like they were their own flesh and blood, and soon they warmed up to them. Ronnie still spent 8-10 hours per day patrolling the river and other areas, but it was mostly boring and routine, there was no one around for miles. He was depressed at the thought of so many dead, and while he had some time to himself, did some soul searching, and remembered passages out of the Bible that helped.

They spent what free time they had planting a garden. Ronnie had been hearing the same rumors that Yellowstone was about to blow that Bret had. They had 5-10 years worth of supplies, but they hoped that a bumper crop in their greatly enlarged garden would push that number closer to 10 years. Thanks to California's liberal energy credits, their log house had a 10KW grid intertie system including a photovoltaic roof, and several wind turbines on their very windy property. Their water came from an artesian well, and only needed a 12vdc pump to pressurize the water for home and garden use. With the acquisitions from Nick and Mike's places, they were set defensively.

Their mountain community was at the end of a long windy mountain road that didn't serve anything except the community, so there was no through traffic, and it was easily blockaded, as it was now. There weren't any commercial vehicles coming into town anyway, so the trees across the road should never need to be moved, and the deputy manning the roadblock frequently took extended siestas since the pile of logs was almost 8 feet high and at least that wide. He was far enough past the barricade that someone would have to know exactly where he was to be able to hit his cruiser from the barricade, and he was armed with one of the town's full auto M -60 machine guns and several belts of ammo to stop any intruders. The sheriff didn't think anyone would bother, but the barricade was the best defense the town had, and he wanted to make sure the deputy guarding it would be able to stop anything short of a military assault using armored personnel carriers. The barrier was ideally situated on a curve in the road with a 500-foot cliff on 1 side, and a 50-foot embankment on the other. The logs were big enough to totally block the road, and heavy enough to stop an 18-wheeler from trying to get through.

*** Near Roseburg OR That same day ***

Jodi, Paul, Robbie, and Nicole were getting used to their daily routine, and had planted a huge garden after clearing off the volcanic ash, then mixing some of it back in to the soil. They weeded every couple of days, and Paul traveled further and further in search of game. Hopefully he could bag a couple of deer before their gasoline ran out. Finally he located a gasoline station that was open, but was only taking gold or silver. Paul took a silver dollar out of his stash, and asked the proprietor how much gas it would buy. "That'll buy 5 gallons of regular, feller." He reached into his belt and extracted a second coin, laid them both on the counter, and said, "Great, I'll take 10 gallons" and went out to pump his gas. The 10 gallons almost filled the truck's tank back up again. He walked back inside and asked the owner if he knew where there were any deer. He looked around suspiciously, then told Paul were there was

a huge herd of deer that hadn't been hunted in years, and frankly were becoming a nuisance to the County, and he could take 2 large deer if he wanted to. That was all Paul needed to hear.

The spot the gas station owner was only a couple of miles away. He drove up to the spot, and didn't see anything even remotely looking like a game warden or sheriff. He saw a huge herd in the clearing, and saying a quick prayer the gas station owner was on the up and up, took out his rifle, loaded the chamber, and took the safety off. The deer were so close that he didn't need to go prone, so he fired from the standing position, and killed 2 deer with 2 shots. The herd spooked at his second shot, so he drove the truck right up to the deer, slit their throats and gutted them, then threw them in the truck and covered them with a tarp. He drove home right under the legal limit, and pulled into his driveway. When he got out, Jodi was waiting for him. The big grin on his face told her everything she needed to know, and ran to Paul and gave him a big hug and a kiss. He took the tarp off the deer and said they needed to butcher and cool the meat as quickly as possible.

While Paul finished butchering the meat, Jodi got ready to can as much as she could. He cut the pieces into quart-sized pieces, and put them into clean jars. Jodi took them over to the stove, added the proper amount of hot brine, then wiped the top of the jar with a clean towel and set it in the canner. Once she had all 12 spaces filled, she took the lids out of the boiling water with a set of tongs and set them on the jars then screwed the rings down finger-tight and closed the lid on the canner. When the timer indicated the jars had been processed long enough, Jodi released the pressure relief valve, and as the jars cooled, she heard 12 musical pings, and knew the lids were secure. She lifted the jars out of the canner with the special jar lifter and set them on a towel on the counter to cool. They took the rest of the day to process all the meat from 2 deer, and she still had meat left over, so Jodi made her special venison sausage with the leftovers. Paul once told her the best part about hunting was her Venison sausage. Jodi counted jars, and knew they had enough meat to last the year, and into next year without hitting their stored supplies too hard.

*** That same day, Winnemucca, NV ***

Martha was back at home, and realized how much she missed the action of being a RN. At the same time, she realized her skills had deteriorated to the point where she shouldn't work unsupervised, and could be a danger to patients. She realized a couple of days later, that she made some mistakes that might have cost that burned man's life. She knew that Maggie didn't blame her, they were so short of nurses that if Martha wasn't available, he would have been triaged out as Expectant, and given enough morphine to be comfortable, and left to die. Even still, having her handy gave him a better chance than he would have had if she weren't available, which was none. She kept herself busy sewing, tending the garden, and reading her Bible, but she slowly lost her will to live. Her relatives were all dead, and Herbert's silicosis was getting worse due to the ash he kicked up every time he went outside. That and the fact that they were getting old weighed heavily on her spirit.

GW's Science Advisor was the lead speaker at this hastily called National Security Council meeting in the Situation room. Gene was sweating bullets. He really didn't want to have to deliver this brief, but it was his job to brief the National Security Council and the President on Science issues. It was times like this he wished he'd listened to his mom and become an MD instead of an Astrophysicist. Finally Condi called the meeting to order, seeing everyone was present.

"Gentlemen, what you're about to hear may not leave this room. This briefing is for background only. The Working Committee the President set up to monitor further volcanic eruptions has received some disturbing news from the USGS. The data is irrefutable, but their conclusions are based on computer modeling, so they're subject to interpretation. Gene if you would."

Gene took a big gulp of water, stood like a man facing a firing squad, and walked slowly to the podium, noisily arranged his papers, looked over at his aide who was running the slide projector, and when he could delay it no longer, began his brief. "Mr. President and Members of the Security Council. Several top Geologists and Vulcanologists at USGS have been pulled off other projects to dedicate themselves to monitoring the volcanic situation in the United States. We have reallocated seismometers, tilt-meters and every sensor that they thought would be useful to monitoring Yellowstone, the New Madrid fault system, and several northwestern volcanoes that were previously thought extinct that have been upgraded to dormant or active, but have yet to erupt. The data collected individually doesn't look too bad, but taken as a whole, especially when it's entered into various volcanism models leads the USGS to believe that the US is facing a catastrophic period of increasing Earthquakes and Volcanic Eruptions as the Pacific Plate collides with the North American Plate."

The Chairman of the Joint Chiefs interrupted "Gene, these plates have been colliding for millennia, what's different now?"

"Mr. Chairman, what's different was the sudden movement of the Pacific plate, as measured at the San Andreas Fault. Lasers monitoring movement detected movement not measured in millimeters, like normal, but in feet, yards, and in some cases hundreds of yards. That much energy has to be accounted somewhere, and we're seeing global increases in volcanic activity, not just the US. When Big Bear blew it's top, we hoped that would release enough energy. We're only realizing now that instead of releasing energy, it's acting as a trigger for increased vulcanism as the near-surface pools of magma redistribute themselves. We have no idea where the next eruption would be, but based on the data we've accumulated so far, our best guess would be a Supervolcano centered in the Yellowstone Grand Caldera."

"But Gene, that Caldera is over 10 times the size of the Long Valley, do you realize what you

are saying."

"Exactly Mr. Chairman. We need to relocate everyone in the country out of the danger areas and into the relatively safe areas of the Southeast and Eastern Seaboard. Previously we would have preferred evacuation to the West Coast, but due to the enormous damage caused by the earthquakes and volcanoes to the west coast, our alternate would be the East Coast. Even still, we can expect 1-3 feet of ash fall along the Eastern coast depending on the winds."

"Gene, that's twice as much as the previous predictions."

"I know Mr. Chairman. The unexpected has occurred, and our model didn't predict it. When the Long Valley Caldera erupted, it sent shock waves through the magma, displacing it in all directions. Yellowstone has a relatively small magma chamber under it, but the entrapped gas is under intense pressure. When this displaced magma reaches the Yellowstone caldera in another 6-12 months, our estimates are it will compress the gas even further, rupturing the entire caldera, and adding 2-3 times the originally predicted 750 cubic kilometers of ejecta to the eruption."

"Wait a Minute - the 750 cubic kilometer projections had over a foot of ash landing on Long Island, now you're telling me we might have to deal with 2-3 times that amount?"

"Unfortunately Mr. Chairman, the numbers don't lie."

"What's the best-case alternate?"

"That our figures are off by a factor of 10 or better, and nothing happens."

"And the worst case?"

"That our figures are 10 times too low."

"What would the result of that be?"

"Can you say TEOTWAWKI?"

"That bad?"

President Bush interrupted them "Gene, Mr. Chairman, I think I've heard what I need to hear. I've decided to evacuate everyone from the danger zones to either the Southeastern or Eastern coasts. Hopefully we've got at least 6 months, because we'll need every minute. OK, Mr. Chairman, I'll sign an Executive order conscripting the airlines, rail and transport systems to move people and essential supplies out of the danger zones. Gentlemen, we can spare no

expense when the lives of innocent civilians are at stake."

The head of Homeland Security asked "Will this be a mandatory evacuation."

"Tom, we don't have the time to force people to leave. I want to go on National TV tonight and tell the people that this is a precautionary evacuation, but we won't be coming back later if they don't go now."

"Ok, Mr. President, that actually makes things easier for us. Now what do you want the evacuees to take?"

"Everything they can. If they've got a pickup or a trailer, they should load it as full as safe of essential items like food, clothing, medicines, etc. This means we need to have MP's out directing traffic and military fuel stops to supplement the gas stations along the way. Anyone who can't afford fuel will be provided fuel for free as long as they're either evacuating or transporting evacuees. Also, there will be no profiteering on this evacuation. If a transport company wants to charge for transport, tell them to bill the US government. We'll either pay their actual fuel costs with receipts, or a set amount per mile. NO one is to charge evacuees for transport - they are going to suffer enough without being robbed blind."

"What about people without transportation?"

I've already said we were going to conscript the transportation system, that includes private and public bus lines. Anyone who needs transportation will either board a bus, train, or military vehicle, and be driven to an area of safety. Tom, the ball's in your court - you'll have to set up housing, facilities and medical care for 100-150 million refugees scattered along the entire eastern and southeastern coast. The military will assist, but it's up to your department to coordinate efforts. Can you handle it?"

"We'll do our best Mr. President."

"By the way, I'm signing an Executive order suspending Civil Service work rules - if you've got any deadbeats, or anyone not willing to work 100%, they can join the refugees."

"Yes Mr. President!"

Chapter 34

*** The White House Oval Office, the next evening ***

"My Fellow Americans,

I've received some disturbing reports from the US Geological Survey Vulcanologists, and I'm confident that we face a national disaster. Sometime in the next 12 months, but probably no sooner than 6 months from now, the Yellowstone Caldera will probably erupt in a Supervolcano several times larger than the recent eruption of the Long Valley Caldera.

I'm calling for a mandatory evacuation of everyone within 100 miles of the caldera, and a voluntary evacuation of everyone to the East of the Caldera all the way to the East Coast. This will be an orderly and staged evacuation. We have plenty of time if we do this right, and with the National Guard and Military working together, we can accomplish this evacuation in plenty of time.

I urge people not to panic, we have over 6 months to get everyone out of the way, starting with those closest to the Caldera. People within the 100-mile extreme danger zone will be evacuated in the next week. Anyone who owns a truck or car with trailer will be allowed to carry essentials like food, clothing, and medicine with them. The Military will establish refueling stations, and evacuees will be given fuel necessary to evacuate at government expense. People without the means to evacuate will be evacuated by Public Transport or military truck to safety.

Tom Ridge assures me that the Homeland Security Department is up to coordinating this task, and he will be in overall command of this effort. The Joint Chiefs have already volunteered the use of their forces and equipment to evacuate people, and erect temporary housing. Also, I've received Tom's assurance that they will not seize defensive arms from law-abiding citizens, even in the temporary housing. But let me make one thing clear, any unlawful use of weapons will be dealt with severely.

I'm also conscripting the airlines, bus lines, and trains for the duration. Evacuees will not be charged for evacuation costs, and the businesses can send a bill for actual costs to the government. Anyone found price gouging will be detained and their merchandise confiscated.

For those of you not in the evacuation areas, I ask that you pray for everyone involved, and if possible, grow as much food as you can. I'm authorizing farmers to utilize abandoned property to raise food for sale to the government. Also, anyone who wishes to grow their own food is highly encouraged to do so, as supplies of stored food will quickly dry up due to the dislocations, and the need to feed so many people.

Over the next days and weeks, you will hear bulletins from Homeland Security regarding dates and routes for the evacuation. I ask the people who will be evacuated first to give us about a week to get set up, and in the meanwhile start packing. Remember only essentials like warm clothes, food, blankets, medicine, sleeping bags, tents, etc. Please do not bring stuff like TV's or luxuries. There probably won't be any power for a while at the refugee centers, so don't bother bringing small appliances either.

In the coming weeks and months, we will update the situation so please keep a radio tuned to your local AM radio station.

Good Night, and God Bless the United States."

*** That Same Evening, Roseburg, OR ***

"Jodi, get in here and bring the Kids, the President's going to address the nation."

Jodi and Paul sat in stunned silence through the address, then when he finished, they all sat at the kitchen table to discuss what he had said.

"We're not in the evacuation zone for this, matter of fact, we're better off than anyone East of Yellowstone. Even the East Coast will get more ash than we will here."

"What about Carl Sagan's "Nuclear Winter" scenario. According to what I read on Frugal's, a large volcanic eruption can cause the same levels of dust in the atmosphere as a nuclear war."

"I guess this means we have to store as much food as we can, and buy heavy winter gear for everyone."

"Not only that, but we'll need to chop and stack as much wood as we can for their wood burning Masonry heater stove, and in case the propane runs out, we'll need extra wood for the cooktop."

With that the teenagers audibly groaned, they knew who would be doing the bulk of the wood stacking and splitting.

Jodi looked at her watch, and said Costco was still open for a couple of hours, and they better go now while they could. Paul took out some cash he was saving for a rainy day, and a credit card with a 10,000 dollar limit.

"Kids, we're going shopping. We need to go armed, it might be ugly out there, but it will be worse tomorrow, or as soon as people realize exactly what this entails."

Ordinarily, Paul didn't let Robbie and Nicole carry a pistol, but in this case, he decided it would be a wise decision, and took out 4 Glock 21's from his gun case and 12 magazines. From their stored supplies, he broke out 4 IWB holsters and 4 double-mag concealed mag carriers. Next they got out 200 rounds of Corbon defensive ammo and loaded the mags. They threw their daybags in the cab of the truck, connected the large U-haul to the hitch, and drove as quickly as they safely could to the Costco. It was surprisingly empty, and they took advantage of that and bought everything they could use, including staples, clothes, winter parkas, sleeping bags, batteries, flashlights, books, coffee, tea, spices, medicine, feminine supplies (Paul blanched at that, then realized that with 2 women in the house, they'd go through a lot of that) then loaded a second cart with TP and other paper products, cleaning products, brooms, and anything else they could think of. On the way out, Jodi spotted quart canning jars and grabbed another flatbed, and bought several cases with lids and rings. Remembering she couldn't reuse the lids, she bought extra rings and lids, maybe 3 times the number of jars she had in stock.

The clerk in the checkout lane quipped "I guess you heard the President's address, I'm surprised we're not busier."

"It probably will take a day or two for the ramifications to sink in, after that look out."

The Clerk's look was priceless "Guess I better stock up too!"

"I'd do that as soon as you can. We just spent our available cash because the probability of getting any of this in a year or two is virtually zero. When Yellowstone lets go, it's going to get dark and cold for several years."

Once the clerk finished checking them out, she got two big stock clerks to help them load their vehicle. Paul was talking to them too, and they agreed that they better stock up while they could. When they finished, Paul gave them a \$5 tip each for the help. They filled the bed of the truck and the trailer as full as possible, then drove home. On the way home, Nicole told her mom one of the stock clerks was flirting with her, and wondered if he knew she was only 15. Jodi only grinned remembering what it was like when she was 16. Her dad walked around with a baseball bat, saying he needed it to keep the horny teenage boys away from his beautiful young daughter. Paul decided instead of the baseball bat to teach Robbie and Nicole Taekwondo, and hand out the "Application to Date My Daughter" to any prospective dates. On top of being seriously funny, it quickly discouraged any horny teens with designs on his daughter when they got to the part about next of kin, and where they would least like to get shot.

When they arrived home, they quickly unloaded the truck and trailer, and went to bed exhausted. The next morning Jodi and Paul made a list of what they would need, and agreed that a stop at the Home Depot was in order. Jodi was actually grateful that Nicole and Robbie

were carrying concealed, because it meant her beautiful teenage daughter had to wear very modest and conservative clothes to hide the fact that she was carrying. Skin-tight low-rise jeans and a shirt that stopped above her belly button wouldn't work when you were trying to conceal a Glock in your waistband. She remembered a talk she had with Nicole when she was 12 and was mad at her mom because she wouldn't let her dress like the other teenagers. She related something their pastor told them, "Girls who dress immodestly get treated like the sluts they're emulating. I'm not condoning or excusing rape, which has about as much to do with sex as measles, but they're sending the wrong message to boys by revealing their bodies like that. Not that teenage boys need much help." After she talked to her daughter, they surfed some Christian Teenager sites that explained the benefits of chastity and abstinence. Nicole realized her "friends" were emulating Madonna and several other female pop stars whose main claim to fame was the fact that they often exposed as much skin as they legally could. With her mom's help, and a lot of prayer, she was able to avoid the snares her classmates were falling into. Once the earthquakes started, Jodi started homeschooling her children when they weren't doing chores.

They headed to Home Depot shortly after breakfast, and while it was crowded, it wasn't as bad as Paul had dreaded. They were still accepting credit, so he put the whole order on their credit card. They bought several carts full of garden stuff including non-hybrid seeds, tools, fertilizer, tomato trays and starting trays, potting soil, florescent light fixtures, ballasts, and a case of warm and cool bulbs. Paul saw a gas-powered chain saw with a 24-inch bar, and Jodi told him to buy it, a spare chain, a box of maintenance and repair parts, a bow saw with 2 dozen blades, several wood-splitting wedges, a new sledge hammer and 2 spare handles. He bought 10 5gallon plastic gas cans, a case of PRI-G, and a case of motor oil. He almost bought a 5KW gas generator, when he remembered he already had 2. His last purchase might have seemed bizarre for their area of Oregon, but they had a nice 10hp self-propelled 2-stage snow blower on sale for 1/3 the normal price. Jodi nodded, and the added it and several huge grain shovels to their growing pile of stuff. Thanks to Dennis, they had plenty of tools, fasteners, and spare building materials in stock, so they didn't need any more. Paul was glad the credit card had a 10,000 dollar limit on it, and he also knew that if Yellowstone blew its top, he wouldn't have to pay the whole balance off. On the way home, he filled up the truck and all the gas cans using the credit card. He noticed gas prices were already edging up, and thought "It's started already -Man's greed would soon triumph, and whatever supplies were left in a week or two would go for several times their original price." He was glad that he had cashed in several of his CD's when they matured, and bought all that gold and silver at Dennis' urging. Dennis explained that gold and silver didn't gain value, the FRN lost value relative to the intrinsic value of a precious metal that tended to keep its value.

The next morning, he asked Jodi if Robbie and him could go deer hunting. If they got 3-4 mature deer, and canned them, they would be set for meat. Jodi said that while they were out hunting, she'd try Costco again, and bring Nicole. Paul wasn't happy, but they prayed about it, and realized that everything was in God's hands, and they had little time to get what they

needed. Paul handed Jodi the credit card, and all their leftover cash minus \$50 for gas and incidentals. Paul and Robbie quickly loaded the pickup and drove to the gas station, while Jodi and Nicole took the Suburban with the trailer for a Costco run.

On the way over, Jodi told Nicole that if it got ugly at Costco, they were to shoot first and ask questions later. Nicole started laughing remembering the Gary Larson Far Side cartoon of the cop asking the dead body what the capitol of Nebraska was. Jodi stared at her for a minute until Nicole explained the joke. When they got to Costco, it was packed but orderly. A clerk was checking ID, and telling them that they were limited to 1 cart or flat bed per membership. Jodi asked if they were still taking credit cards, and the clerk said "Yes" - that was all Jodi needed to hear. They grabbed a flat cart, and drove over to the food aisles, and stocked up. Jodi noticed the prices were 20% higher than last night, but didn't comment. Finally they had everything on their list, plus some more feminine products and OTC meds. Jodi thought the credit card would start smoking when they got the total, and they pushed it out to the Suburban.

The same stock clerks were there as last time, and offered to help. Jodi knew they'd be safer with the two teenagers around them, so she quickly agreed, surprising Nicole. Right as they were leaving, a purple Neon driven by a couple of black gangbanger wannabes drove up and started hassling them. Jodi told them to get lost, and when the passenger pulled a gun out of his waistband, Nicole drew in one quick motion, and double-tapped the dirtbag. The driver stood on the gas to escape, only to lose control and drive smack into a light pole in the middle of the parking lot, leaving the dayglo Dodge Neon crumpled into a heap. Unfortunately, the obnoxious "gangsta rap" continued to blare from the stereo. The two stock clerks asked them if they were OK, and Nicole reholstered her Glock before anyone else knew she was armed. Jodi shoved her into the passenger seat, and got out of there fast before the police showed up. She made it home before her nerves caught up with her, and she sat in the driver's seat crying.

"Mom, what's wrong. You said to shoot first, and he pulled a gun."

"I never expected we'd actually have to kill anyone."

"Mom, I hate to tell you, but those two dirtbags were talking about raping us before the passenger pulled a gun."

"Why didn't I hear that?"

"Probably because you never listen to rap, and the lingo would sound like gibberish to you."

"Ok, thanks Nicole, you probably saved both our lives."

"Don't worry Mom - Dad taught us to be quick on the draw. I'm glad I was wearing one of my

bigger shirts, he was staring at your cleavage and never saw me draw."

Jodi looked down, and realized she was wearing a button down shirt, and the top button must have broke while they were in Costco. She hugged her daughter, and they went inside and sat on the couch until their nerves were better. Finally they had to unload the Suburban. Meanwhile, Paul and Robbie stopped at the same gas station as last time Paul went hunting, and the same attendant was there.

"Hi, how's things?"

"Not bad, haven't seen you around here in a while."

"Decided to come back and see if we could harvest some more deer. I've got my son with me, and we wanted to take 4 deer."

"Sounds OK to me, didn't hear any complaints from the last time you were shooting up here."

"How much you selling gas for?"

"We're up to \$5 per gallon cash or \$4 gallon gold or silver."

"What's silver trading for right now?"

"I'll give you \$10 per ounce for silver dollars."

Paul knew he needed about 15 gallons of gas, he was below a quarter tank, so he handed the attendant 6 silver dollars. He filled the tank, and drove out of the station. 5 miles later, they were at the hunting area, and there were deer all over the place. They took out their AR-15's stuck their earplugs in, and then shot 4 of the largest deer at about 75 yards. They quickly put up their rifles, and had the 4 deer gutted and loaded onto the truck. Paul covered them with a tarp right as another truck came up. They looked like hunters, and didn't say anything, so Paul drove out of the area, and drove home cautiously, watching his rearview mirror all the way home.

When they got home, Jodi hugged the stuffing out of Paul then started sobbing. Paul knew something was wrong, and took her to their bedroom to talk. When she finally calmed down, Paul asked her "Anything happen while I was gone?"

"Nicole had to shoot some gangbanger wannabe. We were just leaving Costco when these two black men in a dayglo Dodge Neon with some obnoxious rap coming out of it pulled up next to us. The passenger said something to me, and I told him to get lost. Next thing I knew, he pulled a gun, and Nicole shot him twice "bang, bang" and the driver floored it trying to get

away, and creamed the car right into a light pole. We took off before the police showed up."

"I guess that's it for the shopping. Is Nicole OK?"

"She seems to be handling this better than I am."

"Ok, I'll talk with her, then I'll be right back."

"Nicole, how are you?"

"Did mom tell you what happened?"

Yeah, and I came in here to tell you how proud of you I am - thanks for protecting your mom."

"Dad, those SOBs were eyeing us like a piece of meat, then one of them said something about raping us, and drew a gun. Mom said to shoot first, and ask questions later, but we didn't stick around to ask them the capitol of Nebraska."

"Real funny Nicole - I'm the one that showed you that cartoon. So you're OK?"

"I'll get over it - my conscience isn't bugging me. One of my classmates was raped by a couple of gang bangers, and told us some of the gruesome details, I'd rather die that let someone rape me."

"Ok, sorry I wasn't there to protect you and mom."

"Dad, you did - You taught us everything we needed to know to protect ourselves. Most of my classmates at school don't know which end of a gun is which. If that had happened to them, they'd be a victim, and possibly dead."

Paul held Nicole, then they prayed together. Finally he told Nicole he had to get back to her Mom, she was shook up about the whole incident. Nicole said "Tell her, Everything was in God's hands, and he was taking care of us."

Paul smiled, looked in his daughter's eyes, and saw Jodi's reflection in them. She reminded him so much of her mom it was scary. He gave her a quick hug, then left to be with Jodi.

*** That same evening, Bret's House ***

Maggie told everyone to either turn on their TV's or hurry up and get over there, the President was going to address the nation in 15 minutes. Everyone arrived right as President Bush started his address. The crowded room quieted instantly when he started talking. Afterward

was another story. Finally Bret yelled "Quiet - if everyone talks at once, we'll never hear each other, I hate to play Kindergarten here, but let's raise our hands before talking."

Leroy raised his hand, and Bret nodded.

"Seems to me Bret nailed it a couple of months about Yellowstone. Since we're already doing everything we can to prepare, all we need to do is keep doing them. Some projects will have to get pushed back, and some pushed up. We'll have to make the shelter habitable for everyone again, and this time, it might be for a year or more, so lets make plans for that contingency."

"Ok, as Before, we need to move all your food, weapons and ammo, and your supplies into one of the two shelters. All the vehicles and the animals will have to fit into the garage. It will be a tight fit, but I'm pretty sure we can do it."

Maggie raised her hand. "What about the horses, we don't have enough feed for another year or more of just feeding them our stored grain and hay."

"OK, Any suggestions?"

Diana raised her hand "How about checking with the Ranchers and finding where they buy their feed. We could take enough in a couple of trips to give both groups enough feed and hay to last a year or so."

"Great idea, I'll call them first thing tomorrow. Anything else."

Ricky raised his hand. "We're going to have to redesign the shelter, it wouldn't be right for us to have to sleep in bunks now that we're married."

Allen raised his hand "Dad, I've got a solution. You could take 1 or 2 extra couples freeing up our bedroom, and if we divided each of the bunk rooms in half, they'd have enough privacy." Veronica chuckled, realizing that if anyone was noisy in bed, everyone in the shelter would know they got lucky. She was glad Jim and Gloria were on the opposite end of Bret's house from Allen's bedroom. Maggie said that Gloria woke them up more than once. Bret thought that was a workable solution, and looked at Ricky, who was nodding vigorously.

Chapter 35

The next morning, Bret called Carl "I take it you heard the President's announcement."

"I was going to call you and find out what you're doing. We're not in the evacuation zone, but I can imagine if Yellowstone lets go, we won't be planting for a couple of years."

"You remember Carl Sagan's Nuclear Winter theory - well it also applies to large volcanic eruptions, and definitely to super volcanoes. We're looking at 1-5 years of greatly reduced daylight and much colder temperatures - that's why I wanted you to build those 2 shelters."

"Well Bret, you were right and several ranchers I know are having crow for dinner tonight."

"It's not about right and wrong, it's about survival. I need your help locating enough hay and feed to keep our small herd of horses alive in the barn until they can safely graze outdoors."

"There's a huge feed company about 10 miles from my place. We could sure use some feed too."

"I've got a flatbed tractor-trailer combo that we could load with hay, but how about grain?"

"The grains come in bins, and they weigh 5-10 tons. Your average forklift can't pick it up."

"How about the wheeled loader at the mine, they've got forks for it."

"That should work easily. That means we'll need another flatbed to haul the loader down the hill and back up. I'd bring another tractor-trailer combo with a box trailer for the bagged feed, dog food and stuff. I'd clean the store out, when the ash falls the roof might collapse, then it's gone for good. We can split the stuff 50/50."

"Ok, but we can just let you have all the stuff for cattle, since we don't have any cattle, just horses, pigs, and chickens.

If they've got enough dog food, you might look around for a dog or two to keep around as a watchdog and companion. Neil's Lab is about to have puppies, maybe he'll give you 1 of the pups."

"Ok, but I'd rather wait until they're weaned and ready to go - I've bottle fed 1 too many sick pups."

Carl laughed and said that they should try and get everything today, and if they ran out of time,

they could clean the store out tomorrow. Bret said he'd be there as soon as he could get everyone organized and on the road. They were going to stop at the mine first, and pick up the loader. Carl said he'd see them when they got there, and signed off. Bret called everyone on the General Frequency and told them to meet at his place, and bring their scavenging gear instead of saying to bring their LBV's and hardware just in case someone was listening. 15 minutes later several pickups drove in the huge driveway, and parked out of the way. Bret gave them a quick briefing, and they climbed into their vehicles. Brad and Kelly were the best 18-wheeler drivers, so they drove the 2 lowboys and Bear drove the box trailer,. An hour later, they arrived at the mine, made quick work of switching the mill yard forks for the loading forks, and drove the loader onto the trailer then secured it. 10 minutes later, they were at Carl's place. He jumped in the crew cab of Bret's truck, and gave them directions to the feed store. They knew from their previous scavenger hunts that the town was deserted, but they didn't take any chances. Allen and Leroy were leading the way with the deuce, followed by Bret's Dodge truck, all 3 18-wheelers, and the rest of their trucks.

They arrived at the feed store just under an hour later, and quickly checked it out. The building, and the entire neighborhood had been deserted since the Long Valley Caldera eruption, and no one had come back yet, so they drove into the parking lot, backed the loader off the lowboy, and using its forks, easily picked up all 10 grain bins. Bret was glad to see that most of them were full. While they grabbed all the bins, Brad found a hay hauler with it's load still secured. He tried to start the motor, and after giving it a jump start, the motor groaned, then finally started. Rick used Bret's electric lock pick once Brad was finished with it, and unlocked all the doors of the store, including the loading bay. Bear carefully backed the rig up to the loading bay, and Carl showed them what to take first. There were bags of feed still on pallets, so they used the pallet jacks to load them first. Carl found boxes full of veterinary medicines, and set them in a cart to make sure they took them. Some were in the refrigerator, and with the power out, Carl didn't trust them, and left them.

When they were finished, they took all the bagged dog food, all the feeders, troughs, and anything else useful. They even took the shelving, light bulbs, and fixtures! If the place would have been carpeted, they might have figured out a way to take that too. By the time they were finished, the store was bare to the walls, and every truck, trailer, and anything they could find to carry stuff was full. They were disappointed that they only had the 1 trailer full of hay, they normally had a huge haystack on the property. Carl said they had plenty of feed for the few cattle they were still raising, and they could go ahead and keep the hay, horse feed, and half of the feed grains, dog food, and the other stuff. On the way home, they dropped off Carl's half of the supplies, then drove home. Once they had the baled hay and the remaining bins of grain off-loaded, they drove the wheeled loader back to the mine, and called it a night.

Bret called Carl the next morning "Is there anything else you need, or we missed?"

"Remember that garden shop? There's a whole bunch of stuff we left behind we could use."

"Anything else in the neighborhood?"

"The garden center is attached to a Super K-mart. If it hasn't been looted already, it would be a bonanza to a bunch of scavengers."

"Can the rest of the ranchers help us clean out the K-mart? I'm sure the frozen food and meat is rotten by now, but there's still a lot of canned food and supplies that should still be good. We'll bring all our 18-wheelers and big trailers. I'd appreciate if you guys could haul your biggest trailers behind your trucks. Also, bring whatever defensive weapons you can carry, we're coming loaded for bear, just in case."

"Ok, see you first thing tomorrow."

Once he hung up, he called everyone, and gave them the good news - more scavenging tomorrow at first light. Bret could almost hear the groans from his place.

The next morning, they took all their tractor-trailer combos, and every truck they owned was pulling the biggest trailer it could. With Allen and Leroy in the deuce with the M -60 providing front security, they knew that they were pretty secure, even with the huge convoy they drove over the hill. When they got to Carl's, 4 ranchers and their families were there to meet Bret. Everyone shook his hand, but Neil and George looked somewhat sheepishly at their shoes. Finally Carl laughed and asked Neil how Crow Pie tasted, and they all started laughing.

"Neil, George, don't feel bad, I was hoping I was wrong, and I still might be. But with the President putting all this effort into a nationwide evacuation, we have to take it seriously. Getting the buildings up was just the first step, now we have to prepare the best we can for the next 5 years in case Carl Sagan was right."

"Carl Who?"

"He was a Liberal Crackpot Astrophysicist. Most of his theories turned out to be pure BS, but according to everyone else who knows, his "Nuclear Winter Theory" is about the best guess we have about the post-nuclear war conditions. It also is pretty accurate for huge volcanic eruptions. Just remember it could be better or worse by a factor of 10. If anything else happens, we could be in a world of hurt."

Neil spoke up "What else could go wrong?"

"A big huge asteroid could hit the Earth, half of La Palma island could fall into the Atlantic causing a Mega-Tsunami, or any one of a number of things."

"Wait a minute - George is moving all the people to the Eastern Seaboard and the Southeastern

US. If an Atlantic mile-high tsunami DID happen, they'd be moving right out of the frying pan, and into the fire."

"Yeah, it kind of reminds me of that Saber-toothed Squirrel in "Ice Age" that dodged 1 catastrophe after another, only to find himself in a worse predicament, and finally got squashed by a Mastodon."

"I saw that too - and just that 1 sequence was worth watching the whole movie! I never laughed so hard in a long time."

"So let's get going, we're burning daylight!"

The convoy, now larger by 4 big diesel trucks with huge trailers, drove down the hill to the Super K-Mart, and got organized. They loaded the flatbeds with the palletized garden supplies, and all the trailers with the contents of the store department by department. They striped everything they could use to the bare walls. Bret had some qualms about cleaning out the Electronics Department - that was too much like looting in his book until Ricky pointed out that they were going to be cooped up in a shelter for a year or more, and unless he wanted a Population Explosion, they might want to get something else for entertainment. The CD's, DVD's, and video tapes that were boxed were easy to collect and distribute later, since each box had multiple copies of the same CD/DVD or tape. They had dozens of high-end DVD players, VCR's, TV's, stereos, digital cameras, I-pods, and regular or rechargeable batteries including the rechargers. They even located several laptops and cases of blank CD and DVD's and jewel cases.

It took a bunch of trips, and most of the week for them to strip the building including the fixtures they could use, even using their forklifts and pallet jacks. It would have taken a lot longer if they hadn't skipped the frozen food and meat section. They cleaned all the cases out of storage, regardless of what was in them, plus the locked secure storage for Sporting Goods, which contained several useful but PC weapons, and cases of ammo. Between Bret and Ricky, locks were no hindrance to them. They dropped everything in Carl's huge driveway and went back for more, and when they were finished, they took the next couple of days to divvy up everything. Bret made sure Carl and the other ranchers took more than their share, since they were critically short of supplies for 5 years. Finally, they loaded everything Carl couldn't use into the trucks and trailers, and stored it at Bret's place.

2 weeks later, Neil called and offered Bret 2 pups from the litter. He drove over, and picked a male and female, then drove them back home to meet their new family. They had over a ton of dog food in sealed storage with desiccants thanks to the huge stock of Rubbermaid products K-Mart had. Carl and the other ranchers got several SKS rifles and all the 7.62x39 ammo they had in stock, and a couple extra cases of ammo for their .308 and 7mm Magnum deer rifles, plus several 12 gauge shotguns and ammo. Bret kept enough of the archery supplies to make

sure they had enough for the Explorers, and some spares, and gave the rest to Carl's group. Carl already bow hunted, and appreciated the extra arrows and broadheads. Bret was amazed at how much camping and hunting gear this K-mart had in stock, and guessed that they were about to have their seasonal camping gear sale. They even got tons of clothes and shoes for everyone, and cases of baby supplies, and general cleaning supplies. What made Maggie very happy was the pallet loads of TP they found.

*** Later that week near Roseburg, OR ***

Jodi had almost forgotten about the incident at the Costco, but Paul insisted everyone wear their pistol belt whenever they went outside including their Glock 21, 2 spare mags, their E&E kit, canteen and knife. He made sure the LBV's and BOB's were good to go, and made sure Jodi's kevlar vest still fit. She thought he was using it as an excuse to get fresh, but decided she enjoyed it later anyway. Nicole made dinner that night. They had canned and made sausage out of the 4 deer, and Paul thought that they had plenty of meat in storage now. They concentrated on the garden, and cutting and splitting wood for storage. Once a week, Paul drove out to the gas station to get gas as long as it was available. He wished he had a 250-gallon storage tank, but the permitting process wasn't worth the hassle. The funny/sad thing was if they lived just 5 miles further out, they'd be in the county, instead of the city, and would have NO problem getting a permit for the tank.

The price of gasoline slowly crept up, but so did the value of their silver dollars. Paul spent the rest of their cash over the next couple trips, and caught up with the local news by talking to the owner. The guy who he thought was the attendant turned out to be the owner of the station, and a font of information, at least about local stuff. Seems the PD didn't bother looking for whoever shot the gang bangers. The two teens were briefly held until paraffin tests proved they didn't fire a gun in the last 24 hours. Paul felt a twinge of guilt, then realized if Jodi had stayed behind and waited for the officers, they'd still be in jail facing numerous charges. Seems the powers that be didn't like guns very much, and hated gun owners even more. If he could get a job elsewhere that paid as well as what he was getting paid, Paul would move in a heartbeat. Now that the Shit had hit the fan, it was too late - they were stuck there. Roseburg wasn't too bad of a place to be stuck when you considered everything. Now that Yellowstone was about to erupt, the movers and shakers were too busy trying to protect their butts to worry about anything else.

Several thousand sheeple wanted to evacuate with the rest of the sheep, even though Roseburg was way to the Northwest of Yellowstone, and actually was 10 times safer than any other place in the country, but like the lemmings they were, they thought that if the rest of the herd was moving, they wanted to go where they were going, and packed up their Volvos, Mercedes, and SUV's and joined the migration eastward. Paul thought "good riddance" but didn't voice his opinion too loudly. Sam, the station owner said the only reason they were still getting gasoline

was due to the Federal requirement that all gas stations would be supplied with fuel for the evacuation. Paul drove to a nearby auto parts store, bought a dozen 5-gallon plastic gas cans, and a case of Pri-G, then took them to the station and filled them up. It took 24 Silver Dollars, but Paul knew that he might need the gas for the snow blower. With the 60 gallons he purchased, he had over 100 gallons in storage, and it was all treated. When he came home, he helped Jodi, Robbie, and Nicole cut down some trees on their property, limb them, and drag them over to the saw horse, cut them to length, and split them. Robbie handled the splitting chores, while Jodi and Nicole dragged the limbs off out of the way, then helped stack the split wood. They were all exhausted when they went to bed that night, and everyone took the max dosage of Advil before going to bed.

*** Near Grass Valley, CA that same week ***

Ronnie met with the Sheriff shortly after the President's message, along with the rest of his small department.

"Gentlemen, we're in no direct danger here, except for the fact that for several years we're not going to be able to grow anything. It will shortly be pointless to patrol, and the county is going broke, and won't be able to pay you. Don't worry about your houses or bills, but I'd highly suggest you use the time we have left to plant as big of a garden as you can, hunt some deer, and store it. I've talked to the mayor, who's talked to Governor Swartzenegger's office, and arranged a huge shipment of supplies. The National Guard is detailing a Chinook to fly a load of supplies out here since the roads are impassable. They'll be carrying a sling load of canning jars, lids and rings, and canning supplies and seeds. They're carrying essential medical supplies in the cabin as well. As final payment, I've got the county to give you 5 cases of jars and lids, and a 12-quart canner, plus whatever gold and silver we have in storage. Also, we need to open the armory and divide up the gear in case some of us don't make it. Let's get the gear sorted and divided now, and tomorrow the Chinook will land in the parking lot in front of the station. I want you all to keep your badges and guns, and radios. For now, we're suspending operations, but we might call you if there's a general emergency like rioting or outsiders attacking the village. We're supposed to get over a foot of ash, so I wouldn't worry too much about invaders or rioting after Yellowstone blows its top, but between now and then, it could get dicey, so I'd go armed 24/7 from here on out. Thanks, that is all!"

Ronnie stood there stunned, he knew this might happen, but never imagined it would. The Sheriff's department was shutting down and they were going home. In a way it made sense, he hadn't seen anyone on the river except Larry and Melissa. He prayed daily that they were in heaven, but he didn't know them well enough to know for sure. Abby and Mikey were both calling them Mommy and Daddy. Ronnie had sat Abby down and explained as best as he could what he knew, and that her parents were in Heaven. She cried and held Ronnie for a while. Ronnie cried right along with her, he knew her little heart was breaking, and there wasn't much he could do for her. He knew she was tough and a survivor, and prayed that she'd come out of

this OK. Once they started calling them Mommy and Daddy, he knew that Abby had turned the corner.

He snapped back to the present when he realized the Sheriff was telling him to take the tactical vests, and put them on the table. There was a huge pile of gear on the table, and every deputy had their name tag on their gear, so it was easy to sort. Finally they divvied up the weapons, and everyone got a Mossberg 590, a case of Federal Tactical 00 Buckshot, and another of Tactical Slugs. Next they gave them each a semiauto CAR-15 with a short-barreled M -203 mounted, a case of SS-109 ammo, a case of 40mm non-lethal grenades, and a box of 40mm HE grenades, which were a recent addition from HSD. The Sheriff was wondering why Homeland Security would be distributing lethal grenades to Police and Sheriff departments, but didn't send them back. Finally, they issued the remaining 45acp and 9mm ammo for their personal weapons. Ronnie preferred the .45acp Glock 21, and the Sheriff gave him the last case of 45acp 200gr Cor-bon JHP ammo. Ronnie asked the Sheriff if he wanted it, since he had a .45 as well. It was Sheriff Reynolds that convinced Ronnie to buy the Glock model 21 as a rookie deputy. "If you've got to carry a pistol around here, you better carry a .45 or better. The 9mm is almost useless against cougars or other large animals, whether they're two or four legged."

When they finished dividing up the gear, the deputies hung around for a while, shooting the breeze, then they started to go home. Ronnie covered the back of his pickup with a tarp, he didn't want everyone to know what he had in the bed. When he got home, he added the weapons and ammo to his huge armory in the underground shelter, then kissed Sally and hugged the kids. The next morning, he drove over to the Sheriff's office when he heard the Chinook, and collected 5 cases of jars and lids, a 12-quart canner, 10 pounds of canning salt, and 5 loz Canadian Maple Leafs. The deputies loaded the rest onto a delivery truck with a bob-tail that drove the rest of the load over to the basement of City Hall. When he got home, he gave Sally the 5 coins and the jars, then spent the rest of the day chopping wood and tending the garden.

Chapter 36

*** The next day, Angeles National Forest, CA ***

Carl called Bret the next morning "Thanks for all the stuff, but we need another building to put it all in. If we put it in the shelter, we've got no where to live. We can't store it in our houses for the same reason you helped us build the shelter."

"Guess this means we'll be assembling another shelter on your property?"

"Right next to the other two."

"Except this time, if you could cover all 3 with at least 6 feet of dirt for radiation protection, just in case."

"You don't have enough dirt on your property to do that."

"The mine does. If we filled several haul packs with dirt, we could cover all 3 buildings 6 feet deep in several loads. The mine already has several piles of clean fill, and we could top that with 6 inches of topsoil and seed it with grass to stabilize the hill."

"If we filled the space in between with rubble, then fill, then topsoil, it would make a nice area to graze horses or cattle. It would be about 100×200 feet square, with rounded easy slopes to climb. The natural slope and grassy covering would disguise the true nature of the structure to distant observers unless they spotted the glint of glass from the windows."

"We could hang green foliage cammo screen in front of the entrances without cutting the light much. That would fool some people."

"Thanks for the idea Carl, we might try that too. Do you want us to come over today or tomorrow?"

"Just like last time, we need the dirt work first if Brad and Kelly are available, they made short work of the dirt work with that huge mine bulldozer. Once they're done, we'll dig the foundation and footings, then frame in the forms and embed the bolts. It only took you a day to dismantle the Quonset hut last time. OK if I call Brad and Kelly direct?"

"I'll call them on our local radios, they aren't as easily intercepted. Besides, I need to go anyway to locate and measure the Quonset."

"Ok, Bret, see you when you get here."

An hour later, Brad, Kelly and Bret showed up at Carl's place with the bulldozer on a lowboy. Carl showed them where they wanted the Quonset hut to go. Bret suggested that they clear and compact a lot big enough to hold another 60x120 Quonset hut, since the mine had plenty of them. Once Brad and Kelly got started, Bret and Carl drove to the mine to locate a Quonset. On the way there, Bret was asking Carl a ton of questions, making sure they were prepared to survive the next 5 years without help if necessary in case the roads became impassable. Carl's eyes bugged out, and realized that Bret was right - 5 years of winter could mean 5 years worth of SNOW! He knew how much snow the northern Sierra Nevadas got in an average winter, and they were just over 500 miles to their north. 16 feet of snow would ruin their whole day. Bret quizzed him about any businesses in their end of the valley that had useful stuff they hadn't scavenged already, and got a short list. Bret told him once they were done building the storage shelter, they'd clean out anything else useful in Wrightwood before the snow or ash collapsed the buildings and buried everything. They'd already harvested their gardens this season, and were looking for ways to expand their aguiculture system. They made it to the mine, and Carl pointed out several Quonset huts, 1 with a security door on it. Bret suggested taking that 1 and using it for storage, since it was also 60x120, and they could mound the dirt over all 3 Quonset huts, creating an artificial hill with a flat top for grazing.

Bret and Carl verified the Quonset had embedded bolts every 18 inches like the other ones had, then they went exploring. Carl pointed out another explosives bunker that Bret didn't know about, and several other useful things, including another 10,000 gallon diesel tank, and several more 500 gallon fuel tanks on trailers. Bret asked him if he could use 1 or 2 tanks full of stabilized diesel, and the look on Carl's face was like Christmas had come early. Bret suggested taking some 2-foot thick-wall gas pipe and building cannons to fire shrapnel, and taking the blasting gel in the other bunker to build several Claymores. Bret hoped they had plenty of electric blasting caps and twist detonators. A 2-foot command detonated cannon firing 1" steel projectiles could decimate any attacker within it's prodigious range. If they backed them up with dozens of home-built Claymores and a command-detonated anti-vehicle mine or two in the road, they would be tough to get to, and that would more than make up for their lack of firepower. Carl was taking notes like crazy.

When they finished, Bret dropped Carl off at his ranch. Brad and Kelly had already finished the dirt work, and were parking the bulldozer back on the lowboy. Bret decided to wait for them and convoy home with them. When they got back to Brad's place, Bret told them what they had found at the mine. Kelly looked like she felt like smacking herself. She'd forgotten that the mine had several explosives bunkers throughout the property. She told Bret now that he'd refreshed her mind where the rest of the bunkers were. Bret decided to check them out the next time they were at the mine.

Over the next week, the ranchers poured the footings and floor for the Quonset hut, and set the embedded bolts. Once the concrete was fully set, Carl called Bret, and they drove over to the

mine, disassembled the Quonset hut, and carried it to Carl's place on a lowboy, then reassembled it. Using the cranes and air compressors on the work trucks made the process much quicker. Bret, Kelly and Brad took some time off when they had finished, and located the rest of the explosives bunkers, and checked them out. Along with Ammonium Nitrate, they had a large quantity of det cord, blasting gel, 40% and 60% dynamite, and almost 100 pounds of Black powder. Bret was confused until Carl told him later several older mines in the area still kept some black powder around for special jobs. Bret realized the Black powder would make a perfect propellant for the black pipe cannons, and gave it all to Carl along with the instructions for how to make command detonated cannons and Claymores or Anti-vehicle mines. Once they had the reinforcing steel mesh stretched and the concrete poured, the ranchers drove back to the mine, located the bunker Bret had told him about, and removed all the black powder, blasting gel, det cord, dynamite, ammonium nitrate, electric blasting caps, wire and twist detonators they had in that 1 explosives bunker complex. The blasting caps were in a separate container that was far enough away for safety.

Once the concrete hardened, Bret got some volunteers to dig and transport enough rock and dirt to cover all 3 Quonset huts and form an artificial hill with a flat top. They used several heavy wheeled loaders to fill the haul packs, which resembled a line of ants doing back and forth from the clean fill piles and Carl's shelters. They used a loader and a lightweight bulldozer to build the artificial hill. Once they had enough rock and fill, they located a pile of topsoil and covered the dirt with a 6-inch layer of good topsoil. They drove back to the mine, then back home. Carl and the ranchers seeded and watered the new hill to get the grass growing to stabilize everything.

A couple of days later when everyone had recuperated, Carl called Bret and asked him if they were up to another scavenging run in Wrightwood. Bret had his list of businesses, and offered to help.

"I was hoping you'd offer. Those 18-wheelers of yours sure make scavenging much easier. See you first thing tomorrow."

Bret made copies of his list, drew up scavenging assignments, and called everyone to tell them they were going scavenging in Wrightwood tomorrow.

The next day, they all drove over to Carl's place, where the 4 ranchers met them, and Carl said when they were finished with the list in Wrightwood, if they still needed stuff, a town called Phelan was only 5 miles further down the road, and had a mall and a bunch of businesses right along Phelan Road. Bret didn't want to go any further than Wrightwood, but decided to cross that bridge when they got there. The first store they stopped at was the NAPA auto parts store on Highway 2, also known as the Angeles Crest Highway. It took them most of the day, but they stripped the store to the walls. There were so many different vehicles between the two groups that it was quicker to take everything instead of selectively taking what they needed.

Bret was glad to see their Interstate Battery rack was full and took all of them.

The next day, they cleaned out Mountain Hardware and Jensen's Finest foods, which were right next to each other. They took everything but the meat and frozen food from the grocery since they had rotted. They were slowly making progress, and hit 2 ski shops to get snow gear in case they got a bunch of snow. They even grabbed the snowboards in case they could find out a way to use them. It took another week to strip the rest of the stores in Wrightwood, then Bret and Carl met and decided they might as well clean out Phelan as well. They sent Allen and Leroy in to Phelan to scout with the deuce and they called to say the town was deserted. Bret shook his head, wondering where everyone went. They were close to Big Bear, but they weren't dangerously close. Now that the ash had stopped falling, it was like driving through grey snow. They still had to wear their N -95 masks to keep their airways clear because they were kicking up dust and ash. It took them another 2 weeks to clean out the stores that weren't destroyed or looted in Phelan. They cleaned out the True Value Hardware store, the pharmacy, the veterinary supply, and several other stores at the strip mall, then they drove down the road, located the Radio Shack, stripped it to the bare walls, and took everything they could use from the Rite Aide Pharmacy, which wound up taking them two days. On the way back home, they checked a couple of nurseries, and took anything they could use.

When they met back at Carl's to sort through everything, Carl was glad that they had built a 60x120 Quonset hut, and installed heavy duty storage racks from a warehouse. They located a specialized forklift at the same warehouse that could pick stuff off the 3rd level of shelving almost 20 feet in the air. The aisles were just big enough to drive the forklift down, and maneuver it to move stuff. Even still, Bret and his group wound up taking a bunch of stuff that wouldn't fit. They had just enough room in the front to store their vehicles, and another Bobcat loader they had located on the mine property when Bret mentioned how useful a Bobcat was for moving ash and snow. They duplicated Bret's access shelter so they could get to all 3 buildings regardless of the weather. Carl showed Bret his aquiculture setup, and it was as big as Bret's current system. Bret gave him enough Tilapia fry to get started, and Brad gave him his surplus worms. It took almost 6 months, but now he had a thriving system, and the hydroponic "garden" was producing enough vegetables that they were canning the excess. Their truck farm's entire output was canned as well that year. Between the groceries, supplies, and vegetables they had grown, they were confident they could survive for 5 years without planting anything outdoors.

Once Bret's group had restocked their supplies and inventoried everything, Bret decided that they could use some more wood just in case. First he sent Bear to top off their diesel and propane tanks, then they scouted for a suitable grove of trees. They located 10 acres of lodgepole pines halfway to Carl's place, so they used their tried and true logging method, and cut then topped the trees where they fell, dragged the tops and then the logs away, carted the logs on the lowboy to Bret's place, then cut and split the wood. This time they felled all the trees first, then started cutting and splitting the huge pile of logs that had accumulated in Bret's

driveway. Finally, they were finished, and there was no more room for wood, the diesel and propane tanks were almost 100% full since it was turning decidedly cold, and they didn't need to "desert fill" the tanks anymore.

When they had free time, the couples slowly transferred their storage and armory except their Glocks and submachine guns back to the shelter, but kept living in their houses. Bret called Carl, who said they could use some more diesel and get their propane tanks topped off. Bear overheard the conversation, and told Bret he'd get right on it. He filled their huge propane tank and their personal propane tanks for their houses, then topped off their 500 gallon diesel tanks from the mine's diesel tanks, and drove back home with the remaining diesel in his tank, almost 4500 gallons worth. They had over 16,000 gallons in propane tanks, plus an additional 5,000 gallons aboard the propane truck, and almost 10,000 gallons of diesel. Bret estimated that they had over 400 cords of wood stored based on the volume of 54,000 cubic feet. They filled the 5400 square foot space over 10 feet high in spots, and segregated the seasoned wood from the fresh cut wood so they'd burn the seasoned wood first. Between the wood and 21 thousand gallons of propane, he knew they had enough fuel to survive 5-10 years without adequate sunlight. Their supply storage was as full as possible, and Maggie added several pages to their computerized inventory. She was smiling when she showed Bret the inventory list, between what they had, and what they recently scavenged, they had way more supplies than they could use over a 10-year period, and they were starting to put stuff into long-term storage that they might not be able to get in the future, like paper products.

Chapter 37

*** 6 months later, The Situation Room, Washington DC ***

The entire Security Council was back in the Situation room under the White House for an Emergency Meeting. As President Bush entered, they all stood, then the door closed firmly behind them. George turned to his Science Advisor.

"Gene, this had better be good, you just got me off the phone with Tony Blair."

"Mr. President, Yellowstone will erupt somewhere in the next 24 hours. We may even be seeing the start of the eruption already as seismometers around the park are picking up shallow microquakes, and just an hour ago, Old Faithful and all the other geysers in the park stopped, and haven't started again. Matter of fact, all the features are either dry or discharging superheated steam. We believe this is due to magma intruding into the chambers blocking the flow of water to the features."

Gene grabbed his ear mic, "Excuse me, Mr. President, but I just received a real-time update from USGS. The eruption is occurring as we speak." Gene motioned for his assistant to bring up the video "Mr. President, we've set up a camera on a mountain almost 100 miles from the caldera so we can monitor the situation." As the video feed went live, they saw a scene no man had ever seen before. The camera had a powerful telephoto lens, and was focused on the Yellowstone Caldera. A thousand foot geyser of molten lava erupted from first Old Faithful, then the other geysers, then the crust ruptured less than a second later, and an area the size of downtown DC flew into the atmosphere at an incredibly fast speed, and the surface continued to erupt ash, magma, steam, and a deadly witches brew of various gases that had been trapped by the magma. As the camera zoomed back, it was impossible to get a grasp of the scale until Gene started narrating "Mr. President, this is just the first part of the eruption. What you just saw was the equivalent of the simultaneous detonation of 20 Megatons of nuclear weapons. The eruption should maintain this rate for at least a week or two. I just pray to God it doesn't rupture further."

"Why not Gene?"

"Mr. President, if the rupture spreads much past the original caldera into the thicker crust, the crust itself could rupture from the force. If that were to happen, it could be an Extinction Level Event. We've got about another 8 minutes of visual left before the shock wave destroys this camera. Condi, you might want to get the KH-11 and Lacrosse feeds on line in case we lose signal." Condi walked over to a console but couldn't take her eyes off the screen, she was fascinated by the horrific scene before her. It reminded her about her pastor's description of Hell when she went to Sunday School many years ago. The eruption went on unabated, and

slowly the caldera expanded until it encompassed the original caldera. Gene was fascinated. They never imagined in their wildest dreams an eruption the size of the original eruption millions of years ago. "Mr. President. This eruption is the same size as the original eruption, not the minor one we were hoping for, I'm afraid our estimates of the volume of ash might be off by a factor of up to 10."

"What are you telling me Gene, is this the worst case scenario we were discussing almost a year ago."

"Not quite Mr. President, but it is definitely worse than our best case scenario. We could get as much as 2 feet of ash along the Eastern Seaboard."

Tom Ridge interrupted at that point "Mr. President, we need to immediately execute Phase II of the evacuation."

"What do you mean, "Phase 2 Tom?"

Tom gulped and looked at the Chairman of the Joint Chiefs for support. Seeing none, he dove in. "Mr. President, We decided to only evacuate everyone to the east side of the Mississippi in case the USGS was wrong. We got everyone out of the 100 mile area, and most of everyone else out of the 500 mile area. All of the evacuees are over 1,000 miles from the caldera."

"Tom where are they right now?"

"Mostly Virginia, Kentucky, and the Carolinas."

Gene interrupted "Mr. President with this new eruption, those states could get as much as 50 feet of ash in the next week or so."

George looked at his Director of Homeland Security. "Tom, that's not good enough. We need to move them to safer areas."

They both looked at Gene, who called up a map of the US showing prevailing wind patterns.

"Mr. President, according to this map, the safest places would be along the Southeastern US from Arizona to Florida. Up the coast will expose them to more and more ash. You might even consider evacuating Boston and New York, but you won't have a lot of time."

"Why not?"

"Within 24 hours, all jet aircraft and helicopters will be grounded due to ash in the atmosphere. If a jet engine ingests enough ash, the turbine blades are destroyed as effectively as if they were

pumped full of sand while operating."

Tom interrupted again "Mr. President, there is no way we can evacuate the eastern seaboard as well, we're stretched to the breaking point just getting the people in the west and Midwest to safety."

"OK, New York and Massachusetts will have to fend for themselves as best as they can. They've got snow removal equipment they can use to remove the ash. Tom, can you relocate those people further south, I really don't want anyone west of the Appalachians or north of Dallas."

"Yes Mr. President."

While this was going on, Yellowstone was continuing to erupt, and the viewers could see a huge cloud of volcanic ash and gas rushing toward them to their viewpoint on the screen. Several National Security Council members cringed involuntarily as the cloud closed on the camera and destroyed it. Condi nodded to an aide, who switched the feed from the KH-11's orbiting over the US. "Mr. President, this is an enhanced visual image from one of several KH-11's orbiting the US. You can see the pyroclastic cloud spreading from the caldera across Wyoming and Eastern Idaho. At this rate, it will cover the Western US by nightfall, and encompass the entire US by 2200 Mountain time.

"Condi, just how fast is this cloud moving?"

She turned to Gene, who answered for her. "Mr. President, the speed of the original pyroclastic flow and shock wave from the eruption was about 600 miles per hour, but it's slowing down. My best estimate is the leading edge is now traveling between 200 and 400 miles per hour. By the time it reaches the East coast, it will have slowed down to around 100 miles per hour. By then, the main threat will be the ash that makes it into the upper atmosphere, and gets distributed downwind by the jet stream and local winds. Here's the graphic I showed you before. The 100 mile perimeter is the Dead Zone, anything inside it is now, or soon will be dead and buried under hundreds of feet of ash. Outside that is the Red Zone, nominally 500 miles away from the volcano. Inside this range ash fall can vary from 100-300 feet depending on wind currents and velocity, and of course distance from the volcano. Now the next ring out is the Yellow Zone, nominally a 1,000 mile perimeter. Inside this zone, ash fall will vary from 50-100 feet, again depending on winds and distance. Outside of that is the Orange Zone, which is anything more than 1000 miles downwind of the volcano., they will receive anywhere from 10-50 feet of ash depending on wind conditions. Of course, if we have underestimated the size of the eruption, these figures can increase by a factor of 10. We originally predicted a week, or 170 hours of eruption. Every hour the eruption continues at it's current rate increases these numbers. If the eruption lasts 200 hours, you can add 10% to these figures, At 250 hours, or 10 days, you can add 50% to these figures. Also, some areas could get 3-5 times more or less ash

than these figures based on surface and high-altitude winds.

President Bush noted the unequal distribution of the zones toward the East, and remembered the jet stream flowed west to east. On the west side of the caldera, the 100-mile Dead zone, and the Red zone was maybe 200 miles to the west of Yellowstone. Also, the "500-mile" Red zone extended way more than 500 miles to the east in the direction of the jet stream.

Gene continued his briefing while President Bush looked at the map, and noticed something. "Excuse me Gene, It seems to me that Kirkland AFB is almost totally free of ash."

"Yes Mr. President, they're well south and protected by mountains."

"Mr. Chairman, we need to change a few things. Is Kirkland up to becoming the Forward Air base for the military assistance for the evacuation and disaster relief. I want to get all jets out of the way of this ash before they're grounded. We can store them at Dallas/Forth Worth, or other civilian air fields further south. I want all the military aircraft that are vulnerable to ash damage to be either stored in secure air-tight hangars, or else diverted south. Kirkland appears to be the closest major air base to the disaster zone that is totally free of ash, and has runways long enough to handle everything in the Air Force inventory."

"Yes, Mr. President, I've already discussed this possibility with the CO of Kirkland, and as we speak, we're diverting the birds south to avoid the ash cloud. One thing, if we have to divert around Dreamland, it adds 500 miles to an already long flight."

"Ok, tell the CO of Dreamland he's shut down for the duration, and as soon as he tells me all their aircraft are secure, I'll sign an EO temporarily deactivating the exclusion zone around Dreamland. I still want any aircraft flying anywhere near Dreamland or Nellis to be under military control."

"Thanks Mr. President, that will make our job much easier. Someone needs to contact the FAA and execute emergency divert instructions to avoid the ash cloud, or any airports effected by ash within 2 hours of their scheduled landing time."

George turned to his secretary of Transport, who said "I'll make it happen right now Mr. President." He picked up a phone and executed the President's orders. All commercial aircraft would be diverted around the ash cloud, and forbidden to land anywhere near it. If they couldn't reach their destination on their available fuel, they were to head south to several designated emergency divert fields that could refuel them so they could reach their destinations. If their destination was too close to the ash cloud, they would be diverted and held at their divert airfields. All over the US, commercial airlines that weren't involved in the evacuation were grounded, and their planes diverted to safer airfields further south. All over the Midwest, there was a massive traffic jam on the ground, and in the air as the aircraft lined

up to fly south, some totally empty, some carrying passengers, some carrying evacuees, and some carrying cargo.

*** Angeles National Forest, that same afternoon ***

Bret was watching TV when the announcer interrupted with a Special Bulletin "Yellowstone Caldera has erupted at 4:00 pm Mountain time today." Bret looked at his watch, it was 3:15, Yellowstone erupted 15 minutes ago. They were about 750 miles away, and sound traveled at 5 seconds per mile. 5 times 750 divided by 60 equaled 62 minutes, minus the 15 minutes since the volcano erupted. They had a little over 45 minutes to get everything under cover, and protected against blast. Even at this distance, the shock wave could cause damage. Bret switched the radio to the Emergency notification frequency. "Alert, All Stations, Yellowstone blew 15 minutes ago. We've got 45 minutes until the shock wave reaches us. We need to get everyone into shelters, and get the animals into the barn. Execute plan Alpha."

Bret called Carl to make sure they got the word, and to get inside their shelters within the next 45 minutes to be protected from the shock wave. Carl knew that even at this distance the overpressure could blow the glass out of the windows, killing everyone inside. He took 10 minutes to install the pre-cut pieces of plywood in the windows, and flip the wings on the catches that would hold them in place. His wife and daughters evacuated to the shelter, taking their pre-packed suitcases and kits. They could come back later for the rest of their clothes and stuff if the house was still there.

Back at Bret's place, everyone was in controlled panic, boarding up their houses, and moving their suitcases and other stuff into their trucks, then driving over to the shelter. Once they were present and accounted for, they used the rest of their available time to corral the animals and move them to the pens they had prepared last time in the garage/barn. Maggie and Bret immediately took off and gathered the horses, got them into the trailer, and into the corral in the garage. Allen, Veronica, and Natalie quickly gathered the chickens while Ricky and the Explorers tried to catch a bunch of squealing pigs. Finally Ricky suggested they just herd them into a corner, then onto the bed of the truck. That actually worked, and they got the pigs into their pen in the garage in plenty of time. Everyone was into the shelters with 5 minutes to spare. Right when Bret's watch alarm went off, he heard a dull boom, then silence. He was glad that the shock wave had dissipated. They went back outside and completed their relocation to the shelter.

When everyone was finished, they helped Brad and Kelly move their aquiculture setup to the steam room. Actually they just moved the fish and the plants in their hydroponic media trays, and left the tanks there - they had plenty of tanks thanks to the Animal feed store. Bret started the steam engine to get it up to temperature once they left to finish their preparations, then they transferred the fish and plants to the warm water. When they finished, they quickly unbolted and stored the solar power panels and the wind turbines to prevent them from getting damaged

by the ash. Until the ash stopped falling, they'd rely on the steam generator for power.

*** 3:00pm Pacific, Near Roseburg, OR ***

Jodi heard the announcement on the radio, and realized the first risk was the shock wave. It took them longer to board up the windows, but they made it, and were in the shelter with time to spare. They were over 1,000 miles away, so like Bret, the shock wave was a dull boom without any power to hurt anything. They got out of the shelter, and made everything ready to stay for a prolonged stay in the shelter, at least until the ash stopped falling, then they could clean off their roof, and hopefully live in their house.

*** 3:00pm Pacific, Near Winnemucca, NV ***

Herbert heard the announcement, and knew that they were only about 700 miles from Yellowstone as the crow flies. He was worried that the shock wave would damage the house, and managed to get Martha into the shelter and the windows boarded with minutes to spare. They were much closer than Jodi and Bret, so the shock wave shook their house, but since he had the windows boarded, didn't break them, but unfortunately Martha's plate collection wound up on the floor in pieces. Once the blast wave passed, they went back into the house. Martha was crying when she saw her plate collection on the floor, and didn't want to do anything else.

"Martha, snap out of it. I need your help. The ash will start falling in an hour or two, and we need to get into the shelter."

"I don't want to go - you go without me!"

"Can't do that girl, I signed on for the whole ride, and we're not dead yet!"

"I don't think I could live in that hole in the ground another couple of weeks."

"I don't think the roof can take the expected load of ash. Within a day or two the house will probably collapse, especially if there's a rain storm after the ash accumulates. Until the ash stops falling, I can't go outside. It almost killed me last time."

"I swiped enough morphine tablets from the hospital pharmacy to kill us both painlessly."

"What's gotten into you Martha?"

"I don't want to live anymore - what's the point. All my relatives and our kids are probably dead."

"Well, if they'd have listened to me and gotten out of the People's Republic, they'd probably be alive."

"Quit bad-mouthing my relatives!"

"Why, you're the only smart one in the family - you definitely got the brains in the family."

"That's not true, my brother Bob's a Lawyer."

"Yeah, a Divorce Lawyer. Imagine making money helping people commit adultery!"

"That's not fair Herbert, he's a very good lawyer. Some people can't stay married."

"Most of them shouldn't have gotten married in the first place. But with the easy divorce laws, most people just think, "OK, if it doesn't work out, I'll just divorce them" then they have kids together, and things get complicated. When it finally comes apart, the shyster lawyer gets most of the money. The father winds up in the poor house paying alimony and support for the rest of his life, and the wife and kids wind up on food stamps. Where's the benefit of that!"

"Herbert, you just don't understand!"

"No Martha, you don't understand. God made it clear. He designed marriage for life, a lifelong bond and commitment "Until Death till us part" and I'm not planning on checking out early!"

Herbert strode out of the room, he had things to do so they could stay in the shelter. Once Herbert had left, Martha opened a small pocket in her purse, took half the morphine tablets out of the full bottle of Morphine tablets, easily a fatal overdose of Morphine, and picked up a nearby glass of water, and took all the pills. She walked over to her family bible, carried it back to the rocker, and sat down with the family rocker to wait to die. Herbert had gone out to care for the animals, and was gone longer than he thought. When he came back, Martha was dead, and when he saw the open bottle of pills, he knew why. He shook his head and walked out to the barn trying not to cry.

*** Near Grass Valley CA, 3:00pm Pacific time ***

Sally heard the warning on the radio, and called Ronnie, who was cutting wood. They quickly got the kids into the shelter, and then boarded up the few windows in the house. 5 minutes after Ronnie closed and locked the door to the shelter, the house shook and the lights went out.

Chapter 38

*** The next morning, Angeles National Forest, CA ***

Bret knew they would be in the shelters for a long time, so he instituted his "chores list" after breakfast the next morning. He wanted to keep everyone as busy as possible, and make sure everything was ship shape. Allen got his favorite chore, cleaning out the horse corrals with the Bobcat. Most of the young women were given garden/fish/worm duty in the steamy-hot steam house. Jeremy and Natalie were responsible for feeding the boiler first thing every morning before breakfast. They didn't mind, they were early risers anyway. Ricky and the rest of the Explorers got to transfer wood from the huge pile every day to a smaller box next to the boiler, so whomever was operating the boiler could reach over, grab a piece of wood and throw it into the firebox without having to walk back and forth across the steam room. Jim and Gloria joined Bret, Maggie, Bear and Nancy in tending the aquiculture system under their house. Brad and Kelly assisted anyone who needed help. Leroy and Brad were responsible for security, but that basically entailed checking the batteries once a week in the radios until the ash got too deep to use the claymores. Brad hoped the command-detonated anti-vehicle mines they installed in the road would protect them once the Claymores were buried.

Several weeks later, Jeremy surprised his dad by asking if he could marry Natalie. By now he was almost 16 and Natalie was 16 going on 17, and they had been "going steady" for almost 2 years, and were sure they wanted to spend the rest of their lives together. Ever since Jeremy stood by Natalie's bed side, they had been inseparable, and could finish each other's sentences. Bret talked to Maggie, Bear, and Nancy that evening, and they all agreed. The next day they were married in a simple ceremony by Brad and moved into Jeremy's room. The next morning Natalie cornered Veronica, gave her a big hug and said "Thanks Sis, you're right, it was worth the wait!" Allen slugged his "little brother" on the shoulder when he saw him again.

Every day when they finished chores, they met for "Theater Time", a couple of movies on DVD and microwave popcorn. Each shelter had a huge big screen TV and surround -sound stereo system in the common room, and a supply of popcorn and drink mixes that varied from lemonade to Kool-Aid, and various flavored ice teas. They had a small ice maker they had gotten somewhere that made 5 gallons of ice cubes per day. They had power to burn so they had some luxuries. Bret checked the sky and the depth gauge daily, and noted the appearance of the sky, and the daily and cumulative ash fall. The first week, they were getting a foot a day, then it started tapering off. According to the radio, Yellowstone Caldera stopped erupting 350 hours, or 15 days after it started, which meant that all the figures the USGS had bandied about were going to double. Bret did some mental calculations, and realized the Midwest would be under several hundred feet of ash, and they could get up to 20 feet. He'd get Allen out with the Bobcat and clear some of the ash away as soon as it stopped falling, then they'd have to use the deuce with the snow blade to clear a path to the houses so they could clear their roofs.

So far they didn't get any rain, but the Midwest and South were deluged by rain, causing buildings to collapse all over the US, especially commercial buildings with flat roofs. Several Convention Centers and Sports arenas that were used to house refugees collapsed under the weight of the ash, killing almost a million people all together. Anyone with respiratory problems suffered greatly as the ash fell, and elderly in nursing homes, and even in their own homes were killed by the effects of inhaled ash because their houses leaked and let in large quantities of ash. Most people didn't understand that volcanic ash was actually closer to ground pumice, and was highly abrasive. When it was inhaled, the mechanical action of the abrasive caused airway damage, then the wet ash clogged lung spaces and killed anyone with respiratory problems, or anyone who didn't protect their airway. The Government tried to help by distributing N -95 and N - 100 filter masks, and when they ran out, CD-grade surplus gas masks with outdated filters. There was no need for the NBC filtering, but the filters themselves were pretty efficient at filtering dust, and in some cases too efficient as the very young, elderly and infirm people died as their filters clogged, and they didn't have the strength to remove their masks, or panicked and forgot how to remove their masks.

Once the ash fall slowed down enough so it was safe to go outside, Bret had everyone don their protective gear including at least a N -95 filter, goggles, and a poncho. First they cleaned out the area in front of the shelters, then when they had enough room to maneuver, Allen got the Deuce out, and using the snow blade, cleared the ash off the driveway, and off the fire road. Once he cleared everyone's roads and driveways, they all went home long enough to clean off their roofs. Everyone's roof was dangerously loaded with 10 feet of dry ash, and they had to get it off before it rained. They remembered how they did it last time, so this time it went much faster and safer. Kelly rigged a double-block and tackle to the rear bumper of their pickup, and used it to belay her husband, who weighed almost twice what she did. It took them a week of hard work, but they got the roofs cleaned off before the first rain storm struck. They weren't out of danger yet, and were still getting over an inch per day of fresh ash, and had to sleep in the shelters until the ash fall stopped and they could clean their houses. Bret was monitoring the temperature, and noticed the daily high was getting lower and lower. He was afraid that Phase II was about to begin - Carl Sagan's famous "Nuclear Winter" would start as soon as global temperatures dropped 10 degrees Fahrenheit. Once that started, they were in for 5 years of weather they never experienced before in California. He guessed the winters would be like the Northern Sierra with up to 24 feet of snow per year, and the summers would be like San Francisco, gloomy at best, with insufficient light to grow food outdoors. Anyone without a year or two worth of food and the ability to grow more indoors would probably starve.

*** That same day, near Roseburg, OR ***

After 2 weeks when the radio said that Yellowstone had stopped erupting, Paul, Jodi and the kids climbed out of the basement shelter wearing filter masks and goggles. There was an inch of ash on the floor, and Jodi told Nicole and Robbie not to take their masks off for any reason outside the shelter until they got the ash cleaned up. Paul said they needed to get the roof

cleaned off ASAP. With Jodi and Nicole belaying them, Paul and Robbie took the rest of the day clearing the roof. When they finished, they slept in the shelter, and decided to clean the inside of the house tomorrow. The next morning after breakfast, they used their 2 shop vacs to clean up the ash, which would destroy a conventional vacuum cleaner if it went through the motor. Jodi and Nicole swept up the ash while Paul and Robbie sucked the ash up into the shop vac. They had to empty the vacuums several times that day, and they still weren't finished.

The next day, they were back cleaning the rest of the house, still wearing their filter masks. Jodi washed the sheets on the beds to get the ash off them, which could cut the fabric and damage it. Right when they finished cleaning up, Paul noticed that the temperature outside was getting colder each day, and remembered something he'd seen on TV about "Nuclear Winter" and realized that a large volcanic eruption could throw as much dirt and ash into the atmosphere as a major nuclear war. He decided to spend the next couple of days cutting wood for their masonry heating stove/cooktop. They still had over 500 gallons of propane, but it wouldn't last long if they used it to heat the house. They drove over to a nearby grove of trees, chopped and sawed them all down, loaded them on the trailer behind Paul's truck, and stacked it next to the sawhorse. Paul told Jodi they could cut the wood to length later. If the snow got too deep, they couldn't get out to get any more wood.

Jodi looked at Paul like he was from Mars, so he quickly explained Sagan's "Nuclear Winter" theory, and that it had been getting colder each day for the last two weeks. They could wind up getting as much snow as the mountainous parts of Washington, or worse. That got Jodi's attention, and they quickly resumed cutting wood. They worked like Beavers on Speed, and managed to cut enough wood in two weeks to last several years. The snow was starting to fall now, and Paul was worried they would get caught out in a blizzard, and called a halt to their wood harvesting. They'd just have to conserve wood, and pray they had enough. If it got too cold, they'd have to live in the shelter where it was much warmer, and come up to cook if they had the wood.

When they got home, they ate a dinner of homemade soup and sourdough bread, Jodi's specialty. Over the next week, they cut all the wood to fit the firebox of the stove, then split and stacked it. Paul covered the wood with tarps to keep the snow off so it would dry. By now it was snowing heavily, and they had to either shovel snow, or trudge through knee-deep snow. Soon they'd have to use snowshoes or cross-country skis to go anywhere. Paul wanted to save the snowblower for emergencies to save gasoline. Everyone got in much better shape between cutting and stacking wood, and shoveling snow. Jodi and Nicole took turns babysitting her younger kids, who were content to sit in front of the TV watching Sesame Street or some other children's programming they had videotaped years ago when Robbie and Nicole were their age.

Ronnie woke up with a headache and it was pitch dark. Remembering where he was, he felt around, located his fanny pack still strapped to his waist, unzipped the small pocket, took out an LED flashlight, and turned it on. He checked on Sally first, who had several bumps and bruises on her from stuff falling on her. Underneath her, Abby and Robbie were fine but scared. Ronnie was amazed but not surprised that Sally would have the presence of mind to protect the kids' bodies with her own in the split second before the shock wave hit, and the lights went out. He made his way to the safety override switch on the wall, and saying a quick prayer, flipped the breaker and the lights came back on. Sally had been struck by falling and flying cans of food. Luckily the glass jars were stored in plastic milk crates, and were fine. He finished checking the room, then went back to Sally and the kids. She'd already bandaged several small cuts and scrapes they had gotten, and then Ronnie saw the gash on his wife's forehead, took a piece of sterile gauze, cleaned the wound, then bandaged it. He evaluated her for shock, but she appeared to be battered and bruised, but didn't have an apparent concussion. He guessed his mom was right, Sally did have a hard head! She wondered what was so funny, and Robbie told her. With tears in her eyes, she reached over and held her husband. Ronnie's parents were in a nursing home near San Francisco that was destroyed in the quake. "It's OK Sally, they're in Heaven with Jesus." When they let each other loose, they started cleaning up the shelter. Once everything was cleaned up, Ronnie said he'd have to check and see if the house was OK. He climbed the stairs and opened the door with some effort. The plywood prevented the windows from shattering, but everything that was on the walls was now on the floor, and the contents of several cabinets were too. He walked back downstairs and told Sally "the house is a mess, but everything's intact. Anything on the walls is now on the floor, and several cabinets opened too. Do you want to clean the mess up today, or should we wait and clean it up tomorrow?"

"Was there any food spilled? We need to clean that up."

"No just dishes and stuff."

"Ok, that can wait until tomorrow."

Ronnie broke out the Coleman Gas stove and made chilli for dinner, and they slept in the basement shelter on air mattresses and sleeping bags.

Herbert walked out to the barn with a heavy heart, started up the backhoe, and dug a grave for his wife, and just in case, dug one for himself. He hoped someone would bury his body when he died, but he wasn't ready to check out just yet. "Dang Martha - why'd you have to go an kill yourself. I was happy with you. I'll be lonely without you gal, but I'll live." He walked back into the house, and with great effort, got her body into a blanket and dragged it to the door. He gently picked her body up with the bucket of the loader and carried it to the grave, and set her as gently as possible into the grave. He wished he could have been gentler with her body, but he was too old and tired to carry her that far. Right as he finished, the ash started falling, so he tied a bandana around his nose and mouth and hurried into the barn to get his N -95 and goggles. He went back out, and filled in her hole, leaving his open, then went inside and quickly carried everything he'd need for 2 weeks into the shelter. When he was finished, he needed some oxygen, and used the nasal cannula for about 15 minutes until his breathing became more normal. Dinner was going to be chilli and whatever he had in the bomb shelter, which wasn't much since Martha didn't think this was a bomb shelter, even though they never had tornadoes in that part of Nevada in recorded history. He started the gas stove, and heated a can of chilli, then went to sleep after he ate dinner. The next couple of weeks would be hard, but he'd survive. He came from a long line of Midwest farmers and ranchers, and they didn't just roll over and die when things got tough. He thought Martha was made of sterner stuff.

Chapter 39

*** Near the Angeles National Forest, CA 1 Year later ***

Bret shuffled out the door wearing his snowmobile suit, parka, balaclava, and arctic mittens with polypro gloves/liners and stepped into his snowshoes to check out the wind turbines and knock any ice off the blades that may have formed overnight. He stepped into a 6-foot drift of snow, and muttered something about "Damn Carl Sagan - he was right!" He walked back into the house, grabbed a snow shovel, and slowly cleared a path to the wind turbines, which were the only things outside right now besides him, and knocked the ice off the blades by smacking the pipe mount with his shovel repeatedly. The thermometer said the air temp was hovering near zero and the wind chill was a balmy -20. He thought about the snow blower, but thought he could use the exercise. They'd been forced into the shelters about a year ago shortly after the ash turned to snow, and he only let everyone out every couple of months to check on their houses and clean the snow off their roofs. It was a major project every time they did it - and the snowplow mounted to the deuce got a workout moving 6-12 feet of snow. So far they had only lost 1 of the tract houses the Explorers were living in. Luckily they had already removed all the supplies from their houses, so they were just without the furniture. When they cleared the roofs, they also piled all their wood onto the truck to add to the shelter's wood pile. It was obvious to everyone that they wouldn't be going home anytime soon. Those tract houses used 5-10 times as much energy just to stay warm. Before they sealed the houses for the winter, Bret showed everyone how to drain the water out of their houses, so they shut off the water and abandoned them until "Spring" which might be 3-4 years later at this rate.

When he walked back inside, he was faced by a gauntlet of babies. The "first generation" was loudly expressing their needs to be fed or changed, and creating havoc. The "second generation" was on the way thanks to the enforced confinement and boredom. They were facing a population explosion because every woman except Maggie and Nancy was pregnant and about ready to deliver. Bret and Bear looked at each other, and jokingly called each other "Gramps". Nancy and Maggie were slowly adjusting to the fact that they would be grandmothers twice over before their 40th birthdays. Allen and Veronica gave them their first grandson, Richard, or Rick as they preferred to call him. They were expecting #2, and Natalie was so pregnant that looked like she had a basketball under her maternity blouse. Kelly and Gloria were handling their pregnancies much better, and were all due within a month of each other, judging by the date of their announcement to the families that they were expecting too. Diana, Sally, Andrea, and Elizabeth all got into the act as well, and Bret wasn't looking forward to 8 more babies, yet he realized that if they were to have a future, the 8 fertile couples would need to have 3-4 babies each, and most of them would have to live to adulthood and reproduce. Bret was wondering how they'd feed all those mouths, then he remembered a truism of Scripture "The Lord will Provide."

Over the next 6 months, the snowfall slowed down enough that they were able to keep the rest of their houses from collapsing. During that time, all 8 women had healthy babies, and were busy nursing and caring for 1 or 2 infants. Gloria, Kelly, and Natalie had their hands full literally, so Maggie and Nancy decided to help out where they could. They had some formula, but decided to save it for emergencies, so all the mothers breast fed their infants. Bret decided to keep the new fathers busy and started rehabilitating the surrounding area as soon as it was safe. First they plowed the roads with the deuce, then they cleared and cleaned off their houses in preparation for moving back to their homes. They located and cleaned a new home for Ben and Elizabeth that was nicer than the one they were living in before it collapsed. They had a bigger battery bank and inverter system, a larger yard, and a developed garden. In the garage was a nice older diesel Ford F-350 4x4 with huge Mud/Terrain tires and a full tank of diesel. Brad replaced the battery, tried to crank it, and when it didn't fire, he guessed that the fuel in the lines was gelled, even though it had tank heaters for all the liquids. The fuel lines were exposed to the cold, and gelled. He grabbed a small catalytic heater, and pointed it at the engine block, and slowly defrosted the fuel lines. Once they were warm to the touch, he shut off the heater, crossed his fingers, and tried it again. This time the engine started right up. He left it running to warm up. While he was warming it up, he checked the rest of the vehicle, and saw some unusual things, like an air tank just like the one on Bret's vehicle and a turbocharger. He took a closer look underneath, and it looked like it had been set up for serious off-roading. He called Ben into the garage, and he needed the nerf step to get into the cab. Elizabeth was back in the shelter with her infant, so Ben drove it back to Bret's house. They parked it in the garage where it would stay warm, and everyone went back into the shelters to await Spring.

*** Near Roseburg, OR that same day ***

Paul woke up to freezing conditions in the house. They were burning wood too fast trying to keep warm. He realized that this weather might last another couple of years, talked it over with Jodi, and they moved into the basement shelter for the duration. It was cramped and crowded, but it was much warmer, and all they needed to keep warm and cook was a small wood stove with a cooktop. Since the basement was insulated by the walls and earth, it took 1/10th the wood to keep it warm. With the constant snow, there wasn't much to see outside anyway, and the gloominess was depressing at times. Once a month, they went outside to clear off the roof before the snow collapsed their roof. Every time Paul and Robbie cleared the roof, they came back into the basement with their teeth chattering despite the heavy work. Jodi gave everyone several cups of hot cocoa until they were warmed up again. Soups and stews were popular dinners while they were "incarcerated" in the basement, as Jodi put it. Paul had drained all the water lines in the house before they moved into the basement, and then shut the water off to the house, and just left it on in the basement. With 3 small bedrooms and 1 bathroom, privacy was at a premium, and their living space was very cramped. As a result, Paul and Jodi spent a lot of their time praying and refereeing squabbles among the kids. Finally they sat Robbie and Nicole down and talked to them. "This bickering and squabbling has to stop right now - we might be down here for a couple of years. We don't have enough wood or propane to heat the house

until Spring, which by the way won't come in April, or even July of this year. I'm starting to think Carl Sagan was right about the Nuclear Winter scenario, and we could face as much as 5 years of weather like this. Eventually the snow will taper off, but the temperatures won't warm up much above freezing for 5-10 years."

Robbie looked at his dad like he was crazy, so Paul handed him a printout of Sagan's article in Science describing his Nuclear Winter scenario. It took Robbie several hours to read the article, and he had a bunch of technical questions to ask his dad. Paul didn't know the answers, but they did have a good set of basic science books and encyclopedias, so he told Robbie to go look in the index of the books and find the answers himself. A couple of days later, a much more contrite Robbie approached his dad. "I'm sorry, I didn't realize it could get this bad. We should be grateful we're alive, instead of whining about not being able to go to the mall. If Carl's theory is right, the mall might not be standing when we get out."

Paul nodded in agreement - the Mall had a flat roof like most commercial buildings in their town. If the ash didn't collapse it - the snow load would finish the job. Their lives became a boring monotony of enforced confinement punctuated by hours of freezing cold weather and heavy work as they tried to keep the roof from collapsing. Paul hoped that the snow would melt soon. While they were waiting for the snow to melt, Jodi and Paul home schooled Nicole and Robbie. Paul added advanced topics in Survival and First Aid since Dennis had a huge library full of survival and Preparedness books, and a bunch of Medical books. Nicole took to Medical studies like a duck to water, and Robbie spent all his available free time reading survival and preparedness books, including Dennis' stash of American Survival Guide magazines he found in a box in the basement. He was mesmerized by the Marine Scout/Sniper training manual, and the older Marine marksmanship manuals. He realized several things he was doing wrong, and couldn't wait until the snow melted so he could go out and try it out. Over the years, they maintained their routine of clearing the roof and solar panels, and clearing the ice off the wind turbine blades.

*** That same day near Grass Valley, CA ***

Ronnie and Sally had gotten the cabin cleaned up the next day, and life slowly returned to normal, or as normal as it could be with over 6 feet of ash on the ground. Luckily they were used to getting snow in the winter, and Ronnie had a snowplow attached to his pickup truck and used it to clean off the area around the house and push it down the hill. It took a little more work to get the ash off the roof, but they finally made it just in time for the snow to start falling in the middle of the summer. Ronnie didn't realize it, but Carl Sagan's Nuclear Winter was just starting. Both Ronnie and Sally were into preparations for any kind of emergency, and had way more than 5 years of food in storage. Once they cleaned out Nick's basement and what was in Melissa and Larry's place, they easily had enough to last almost 10 years. Robbie wished they had more gasoline for his snowblower, but there hadn't been a delivery since the

Big One hit over a year ago. Law enforcement had priority, but with the Sheriff's department out of commission, he couldn't go fill up his truck with diesel at the gas station any more. He called the Sheriff on the radio, who told him to drive over to the station, and he'd give him enough to keep his driveway clear in case he got called out on an emergency. Robbie knew that was BS, but he took the offer and got an additional 20 gallons of gas and added Pri-D to it as soon as he got it back to his house. The next day, the snow came down in earnest, and they had their first blizzard of the year, and it wasn't even Winter.

Robbie was busy the rest of the winter trying to keep the snow from getting dangerously deep on the roof, and Sally kept the kids busy between lessons and games. Robbie and Sally made survival lessons into games so the kids would enjoy learning stuff. They were taught ageappropriate skills, starting with the "hug-a-tree" skills, then graduating into blowing a whistle when they were lost while they sat on the ground with a Mylar blanket wrapped around them. After Sally told Ronnie what Abby had told her she did in the basement shelter to survive, Ronnie realized Abby was a very mature 5-year old and decided to teach her anything she showed an interest in as far as survival knowledge. The first thing Robbie taught Abby was how to start a fire with flint and steel using a deep pie pan, and all about fire safety. He explained to her that she should never start a fire inside the house unless Sally or Robbie was supervising, and to only start a fire outside in an emergency, and to first clear a 10-foot circle of all burnable debris. After a couple of false starts, she got the hang of using flint and steel, then Robbie showed her how to use a ferrochromium rod and striker with cotton ball/PJ tinder instead of the flint and steel. Later, when he was sure she knew her lessons, he handed her a fanny pack kit that included a magnesium bar with a ferro rod, and a keychain kit that included a LED keychain light, a BSA Hot Match and striker, a compass key fob with a thermometer on the back, a Swiss Army Hiker, and a Florescent Orange Fox-40 whistle.

Over the next couple of years, they taught Abby and Robbie basic survival skills and read books to them about edible plants and showed her basic first aid skills, like running a burn under cold water, how to apply a bandage or band-aid, and how to stop bleeding using direct pressure over the wound. Ronnie was glad that Abby seemed to soak up knowledge like a sponge. Even Robbie seemed captivated by what his big sister was doing, even if he was too young to join in. Sally started Abby learning the Alphabet and once she mastered that, they started on phonics as an introduction to reading. She read "Dick and Jane" primers to both kids while they read along with her, so they could associate the letters with the sounds Abby was picking it up very quickly for a 5-year old, but Sally made sure she kept the lessons short and entertaining. Years ago, they purchased some pre-1960's school textbooks when the school was getting rid of them to make room for the "new" textbooks.

At one point Sally wanted to be an Elementary school teacher, but dropped out when she realized what BS they were supposed to be teaching the kids. It was totally different than what she remembered growing up. One of the biggest fallacies that they were pushing was there were no "Wrong" Answers, which made it very difficult to teach Math. Their theory was that

they shouldn't damage the fragile egos of the little kids by subjecting them to the embarrassment of getting something wrong. Instead they supported the Politically Correct psychobabble from the current generation of pop psychologists, who claimed it did more harm to be wrong than to learn the "correct" answer. Sally told the dean of her Education Department exactly where she could stick it, and quit.

A year later, she met Ronnie right after he graduated the academy. They were married soon after that, and tried for years to have kids, until 1 day they discovered they couldn't have kids, and found out the IUD Sally used at her Liberal Arts College for birth control was the direct cause. Back then doctors were pushing the IUD as the latest and greatest form of Birth Control with little or no side effects like the existing high estrogen birth control pill. Sally didn't sleep around, but was talked into it by her mother as "insurance". She later found out that her mom and dad were forced to get married when he got her pregnant on a hot date. When she found out that the IUD had made her sterile, and she wasn't sexually active anyway, she blamed her mom, the doctors, and God. Now that they adopted Abby and Robbie, her heart softened, and she wished she could call her Mom and apologize, except she'd been dead for 5 years and they never reconciled.

She walked into their bedroom, knelt next to the bed, and broke down sobbing "Mom, I'm sorry I never forgave you. Now, when it's too late, I wish I could see you again to tell you how sorry I am, and that I forgive you. I think you'd like Abby and Robbie. Right before Yellowstone blew, Ronnie went to the county courthouse and filed paperwork to legally adopt them. They had no known relatives, and thanks to a directive signed by Governor Swartzenegger, we were able to immediately adopt both of them under emergency provisions to ensure that orphans and abandoned children could be placed for immediate adoption. The judge signed the order that same day. They're a couple of beautiful tough kids. Abby kept them alive for several weeks until Ronnie found them, and the first thing she said to him was "So you going to get us out of here, or ask some more stupid questions?" Abby's tough and has a really funny sense of humor. Robbie is active and inquisitive, but doesn't say a lot. He knows how to talk, he just sits there quietly sometimes and either watches everything, or holds on to Abby or me." Sally slid to the floor exhausted, and fell asleep.

Chapter 40

- *** The Situation Room, Washington, DC 5 years later ***
- "Tom, I never understood how you could manage to move half the US population to the Eastern and Southeastern Coast?"
- "It was a tough job Mr. President."
- "Tom, when we're alone, you can call me George."
- "Yes Sir, anyway, half the people were more than willing to go, and another quarter decided to leave when we stopped the food shipments."
- "Brilliant, so how many people are left in the interior?"
- "Maybe 10% of those who survived the initial ash fall, about 2-5 million people scattered over most of the central US."
- "How will they survive?"
- "One old geezer told the FEMA team that if they took 1 step on his property, he'd cut them down. Evidently some people stockpiled food and weapons, and dug deep shelters."
- "Why on earth would anyone dig a deep shelter Tornado shelters only need to be below ground level."
- "George, evidently some people think the Chinese are going to nuke us."
- "They Are? Why didn't someone tell me?"
- "Settle down, the Chinese aren't going to nuke us anytime soon, they can't reliably hit our MX missiles, or our Boomers."
- "Well Thank God for that!"
- "Yes sir!"
- "So the situation is under control?"
- "Until we run out of food in two years."

"What do you mean - we'll be out of food in 2 years?"

"I briefed you about that years ago. Remember Sagan's Nuclear Winter scenario?"

"Vaguely."

"We're now just coming out of the Cold phase of the nuclear winter scenario, and we're about to enter the hot dry phase. Unless farmers can irrigate their fields, we'll have massive crop failures right when we run out of stored food. Not only that, but the manufacturing plants are under 20 feet of ash, and probably collapsed when the snow started falling."

"Maybe we should move to Mount Weather?"

"Sir, I'd highly suggest Cheyenne Mountain, their shelter is more secure, and better stocked. I'll tell Congress that they can move to Mount Weather when we're ready to evacuate. We need to wait until the situation's critical, or Congress might call for an Election despite your EO suspending most of the Constitution."

"OK, I think I can stretch the Emergency out that long. Maybe I'll call a press conference?"

"Better not sir, you know what happened the last time you did that?"

"Right, instead, I'll address the nation tonight - I'll need my speech writer and the Chief of Staff to help me think up a good emergency that has nothing to do with food."

*** Later that evening, near the Angeles Forrest, CA ***

Everyone gathered around the TV at Bret's place to watch GW's first Presidential address since he declared a state of National Emergency over 5 years ago.

"My Fellow Americans. Yellowstone has stopped erupting, but the danger's not over yet, we still have civil unrest to get under control and cleanup to accomplish. Most of the US is covered by 10-50 feet or more of ash. We'll be asking for assistance from the refugees to form cleanup crews to start on the East Coast and work west, cleaning and rebuilding. Any refugees with construction experience will be utilized rebuilding, and the rest of them will be used to clean up. It will be like the old Conservation Corp, except we'll be rebuilding the infrastructure and cleaning up the damage. We want volunteers, but anyone staying in a government shelter from here on out will have to work for their food and shelter unless you're physically incapable of any work

Thank you, good night, and God Bless the United States."

As soon as the President finished Bret said "Thank God we're not stuck in a shelter, This BS is basically Communism minus the Mao Jackets and bad haircuts."

Everyone agreed with Bret, they'd been trough too much to surrender their freedom so easily. Over the last 5 years, all the young couples plus Brad and Kelly now had 2 or 3 children, and were in the process of moving back permanently into their own homes now that the snow was starting to melt. The ash had been cleaned out long ago, and they were almost finished plowing the snow. Bret made contact with Carl and his group, who had survived the ash and snow, but needed to get their fields planted ASAP for food they'd need the next winter. Bret asked him what to do with the ash, and Carl said to turn the last couple of inches back into the soil, it would improve it. Bret thought for a minute, and asked him about using it in the hydroponic solution, and Carl laughed "Not unless you want a tray full of concrete!"

"What do you mean concrete?"

"When that ash absorbs water, it gets even more dense than it already is. They use Pearlite in hydroponic systems because it's mostly air. When ash gets wet, it sets up like concrete. That's why you only want a couple of inches tilled into your topsoil. If you don't have enough dirt or sand mixed in with the ash, it will turn to a concrete-like mix and be harder than clay to break up."

"Thanks for telling me. Do you need any heavy equipment?"

"We borrowed the loader from the mine, but we could use the road between us cleared, and a refill of our propane tanks."

"I'll send the deuce and the propane truck tomorrow. How you fixed for seeds?"

"We've got a 5 year supply of non-hybrids without saving seeds."

"Sounds like you're set. OK, You'll get your propane tomorrow unless we have to un-bury the tanks."

"Crap - forgot about that - we'll go over with you with the loader to clear the ash away from the dispensing equipment."

"OK, we'll bring the backhoe too to handle the light stuff, or when we get too close to the tanks to use the loader."

"Good Idea - see you tomorrow."

Bret met with Bear, Allen and Leroy that evening, and they agreed to go plow the road between

their place and Carl's ranch, then fill his propane tanks, and bring back a load or two for them. After 5 years of use, they could use almost 10,000 gallons of propane, so Bret hoped that they could get to the tanks, and they weren't damaged between the ash and snow.

The next morning, they left with the M -60 mounted on the deuce, even though the snowplow limited it's usefulness forward. They were wearing their winter gear since the cab was open, and they each brought their full BOB gear. Bear was following them in the nice heated cab of the propane truck. It took the whole morning just to make it over the mountain. With the amount of snow and ash they were moving, they really could have used the loader, but they left it at the mine. Finally they made it to Carl's shelter, and when they got there, Carl had a surprise for them. When he opened the door of the shelter, he was followed by a stunningly beautiful black woman.

"I'd like you all to meet Sharon. Sharon, if my memory serves me, the guys next to the snowplow are Leroy and Allen, and that funny looking guy by the propane tanker goes by Bear."

Leroy jumped down out of the cab, stood there then extended his hand to shake hers. "Ma'am, it's nice to meet you."

"Who you calling Ma'am - I'm probably 10 years younger than you."

At this point, Allen had made his way to Sharon's side. "Sharon, Leroy's a Marine, and I'm sure he was just being polite. By the way, nice meeting you." Allen shook her hand then went off the talk to Carl while Sharon stuck close to Leroy.

"Excuse my bluntness, but where'd you come from?"

"My husband and I lived in Los Angeles, and were trying to get home from Las Vegas after Big Bear erupted when the National Guard detoured us North near Hesperia, and he remembered the Angeles Crest Highway went trough near Glendale. We ran out of gas a couple of miles down the road, and were set upon by a bunch of hoodlums. Rodney fought them off, but got stabbed in the guts. We holed up in an abandoned ranch and I tried to help him, but he died a week later. I've been moving from ranch to ranch since then. Carl was good enough to take me in when the ash fall got really bad from Yellowstone, but I can't stay here. So Leroy, what's your story?"

"I've been divorced for almost 10 years now - it was a messy divorce, she was sleeping around on me while I was in the Big Sandbox, and when I got home, she filed for divorce and basically got everything. I've been single since then."

"I've got no where else to go Leroy. If you could take me in, and let's see what develops."

Leroy didn't know Sharon at all, but sensed she was a good woman, and it wasn't like he'd have many other offers. He called Bret on the radio, who said they had another couple of houses available if they wanted their own house, and he'd be more than happy to give them enough supplies to get started. That was all that Leroy needed to hear. "Sharon, Bret said we have a spare house if you want to live in a real house instead of a glorified Quonset hut. Bret will give us enough stuff to set up housekeeping. If you're willing, I could use a friend, and let's keep it platonic until we know each other better. One thing, most of LA's been destroyed between the earthquakes, volcanoes, ash, and snowfall. Any building that wasn't designed to take a 20-foot snow load probably has a collapsed roof, and all the freeways are down. We only made it through the roads by having some very capable vehicles and people."

Sharon looked Leroy over. He was in his late 40's or maybe early 50's but he was in good shape. She decided that he might make good husband material. She told Leroy she needed to get her stuff, and she'd be right back. Allen overheard the conversation and offered to ride with Bear. Leroy laughed and said OK. When Sharon came back, Leroy asked her if she had any heavy winter gear, and she said that Carl had already given her a snowmobile suit and parka and several sets of polypro underwear from their supply. She ran back into the house to change quickly, and came back out wearing a snowmobile suit and parka. He showed her how to operate the M -60, but she didn't fire it - they didn't have much ammo to spare. "I hope you're planning on driving this thing, I haven't seen this many levers and knobs, and I don't have a clue what they're all for."

"OK, I guess this means I'm driving, and you'll man, I mean woman the gun."

"You're funny Leroy, now let's get this show on the road." On the way over to the propane yard, they talked about everything and nothing. Sharon was glad that Leroy told her he was a Christian. That was her #1 qualifier for a potential husband. Over the short drive, they drew closer. Finally they reached the gate, and it was buried in snow. Carl made short work of the snow and ash with the loader, then they got the gate unlocked and between the plow and the loader, they got the snow out of the way at least well enough to load the propane tanker. Allen unloaded the backhoe loader, and made short work of the remaining snow and ash around the dispensing equipment. Once Bear had the tanker loaded, he followed Carl back over to his shelter and filled their propane tanks, then drove back over to the tank farm and filled up again. They made much better time home because the roads were already plowed, but they still had to drive slowly in case the roads had iced up. On the way back home, Sharon told Leroy that she was a Trauma Nurse at UCLA Medical Center. Leroy smiled and said "Hopefully we'll never need your medical knowledge, but it's nice to have. So how you feel about guns?"

"I used to hate them, and blamed them for all the shooting deaths we'd get in there until a LAPD police Sergeant came in with a gunshot wound to the leg, and told me that it was so dangerous in LA because the only people besides them who had guns were the bad guys, and their uniforms made them targets. He had a friend who was a sheriff's deputy in Winnemucca,

and he never fired his gun at anyone, and the only time he shot it was to put down an injured animal. When he asked his friend why he never had to shoot anyone, he explained "It's because everyone, including the good guys are armed, so the bad guys know that if they use a gun to commit a crime, they're likely to get shot by an armed citizen, and they didn't know which ones were armed until it was too late." That made sense to the Sergeant, who transferred to Nevada as soon as he got out of the hospital. Larry worked for a big studio in their Computer Graphics department, so we couldn't leave. He did decide to carry concealed illegally after that, which saved my life when those dirtbags attacked us. I wish he'd have had something bigger than his Colt Commander. But I understood why he wasn't carrying a bigger gun - he was a skinny guy, and a bigger gun would have been visible."

"Sharon, don't you mean high-capacity when you said bigger?"

"Yeah, we kept 2 Para-Ordinance P-14's at home, plus a Remington 870 shotgun full of buckshot next to the bed. He tried to carry the P-14, but he felt more comfortable carrying the much slimmer Commander. He hoped 7 rounds would cure the problem, not realizing that if the stuff hit the rotating blade, he might need a backup magazine." She looked over at Leroy, who was wearing his LBV full of M -16 magazines, and the M -4/M -203 mounted to a bracket on the dash, and recognized it from the movies. "Seems you guys are well armed!"

"We scavenged some of it from neighboring abandoned ranches and stores in the surrounding areas. You'll have to see our storage inventory to believe it."

"Can you teach me how to shoot? I'm pretty good with 1911's and shotguns, but never learned how to shoot a rifle."

"Sure as soon as we get the range cleared off. Hopefully you can shoot a Glock 21?"

"What caliber is that?"

"That's the full-sized Glock .45 with a 13-round magazine."

"Ok, so it's about the same size as the P-14?"

"And several ounces lighter minus the safety."

"Isn't that dangerous?"

"Nope, the trigger has a safety in it, plus there are several passive safeties that don't clear until the trigger is fully pulled to the rear releasing the striker. Everyone in the compound carries either a Kimber or a Glock 21 with a round in the chamber."

"Ok, Larry and I were trained at Gunsite in Phoenix Arizona about 10 years ago. I asked the LAPD Sergeant where to go for training, and what equipment we'd need. He suggested calling Dave Harris at Gunsite since he used to work with the LAPD and ask him. He suggested a high-cap .45 and a Mossberg or Remington extended magazine shotgun with a Border Patrol setup. He was nice enough to send me an e-mail with a short list of guns and equipment, and a suggestion that we sign up for Gunsite's Pistol 150 and 250 course, as well as their Defensive Shotgun class. It would take a little over a week and cost around \$4,000 dollars for both of us, plus ammo and equipment. That night, Larry talked to Dave, then we went down to the gunshop the next week and tried out guns. The P-14 fit the best, and the gunshop owner suggested the Remington 870 with the extended mag. Dave had suggested the place since it was a cop shop, and the owner knew what he was talking about, and was a graduate of Gunsite, so he knew what worked and what didn't. I liked the Kimber better, but the owner said we needed to get the same gun so we could share mags if necessary. That was all I needed to hear, so we got 2 P-14's and 20 mags - The Assault Weapons Ban was right around the corner. He had 2 Scattergun Technology Remington 3-inch Magnum 870's in stock with the TRAK-LOCK® Ghost Ring Sight, extended magazine, the 6-shot sidesaddle, and the SURE-FIRE Tactical Light forend, and a tactical sling. He made us a deal on two cases of Corbon 200gr JHP defensive ammo, 4 cases of Winchester 230gr FMJ practice ammo, 300 rounds of frangible ammo for the simulators, and a case each of the Winchester 12 gauge Tactical 00 Buck, Tactical Slug shotgun ammo, and AA Target birdshot. He said by the time we got done with Gunsite we would have shot up most of the ammo, and we should buy more as soon as we got back. He included 2 nice gun cleaning kits including brushes, mops, and patches for the .45 and 12 gauge."

"Sounds like a nice setup. I couldn't afford anything like that on my salary, and if it weren't for a buddy of mine in supply, I wouldn't even have this (patting the M -4) since my ex took me for everything I owned, including a Desert Storm commemorative 1911, and 2 match grade AR-15's. She hated guns, so I'm sure she did it just to spite me. I got the last laugh though. She moved to Marina del Ray, and I'm sure that if the earthquake didn't kill her, the tsunami did."

Sharon remembered that Leroy's wife was stepping out on him, so she didn't say anything. "Too bad you never went to Gunsite. Once I got over my fears, I had the most fun I'd had in years. By the time we finished the Pistol 250 course, I was shooting a darn near perfect Failure to Stop drill from 15 feet to 25 yards. The shotgun really kicked, but I appreciated the extra firepower of 9 30-caliber hardened and plated lead pellets striking the kill zone of the target at the same time."

"I got all my weapons training in the Corps. First in Basic, than in the various schools I attended on the way to becoming a Recon Marine."

"Larry had a friend in Recon that was in Desert Storm. I don't remember his name though."

"It's too bad I never met Larry, he sounds like my kind of guy."

"That's funny, that's exactly what his Marine friend said. He almost enlisted in the Marines, then went to a technical college, and got hired by the studio he used to work for until the earthquake. The only reason we weren't killed is we were taking a rare vacation weekend in Vegas when the earthquakes hit. His studio was flattened, so we were staying with friends. Finally we decided to try and head home right before Big Bear let go. Once it erupted, we were diverted north from 15 at Hesperia, and the nearest road heading west was the Angeles Crest Highway. The rental car's fuel gauge must have been broken, because we ran out of gas right after we turned north. A bunch of white trash in a pickup chose the moment we were abandoning the car to drive up. They made it plain what they wanted to do with me, and Larry pulled his Commander and shot all of them. 1 of them grabbed me, and when Larry pistol whipped him to get him off me, the guy must have stabbed him in the guts. He must have punctured his intestines. I did what I could with our first aid kit, but he died from the infection a week later. I buried Larry and kept moving from ranch to ranch as the food ran out. Right before Yellowstone blew up, I ran into Carl who was out front with the loader clearing off the ash. I explained who I was, and that I was a trained nurse, and I was unarmed. He talked to the rest of the people, and said I could stay until it was safe to move on - I wanted to try and get back to our house."

They finished talking right as they drove up the ranch road and headed towards the shelter.

Chapter 41

Bret met them as soon as they got out of the deuce. Leroy introduced Sharon to Bret "Bret, this is Sharon, Sharon Bret." Bret stuck out his hand, and said "Nice to meet you. Let's go inside and get comfortable while I introduce you around." While Bear transferred the propane to the storage tanks, Sharon met the rest of the members of the community. Maggie was really glad that Sharon was a Trauma Nurse. Sharon found out that they had raided a Medical Supply store, several pharmacies, and came away with just about everything she could use to save a patient, at least until the meds expired. While she wasn't an ER doc or a surgeon, she could do a lot to save someone who was injured or wounded even without performing surgery. She'd assisted enough ER docs to be able to set a fracture, and was really happy when Maggie told her they had grabbed an auto-defibrillator. With the auto-defibrillator and the heart drugs they got, she'd have a good chance of saving a heart attack victim.

When they were finished meeting everyone, Bret showed them the house he had in mind for them. The Explorers had spent the day cleaning the house out for them, and Leroy made sure he thanked every one of them personally. The house was a tract house like the rest, but the owners had installed a 10KW AE system instead of the standard 5KW system, and it had a full basement underneath. The southern exposure of the roof was covered with thin-film PV roofing, giving them over 1,000 square feet of solar panels. The roof was in good shape since they cleared it with the rest of the houses in the area when they cleared roofs. Between the roof and the wind turbines, they had over 8KW of generating capacity, and over 50KWH of battery back up. Leroy was glad that they used the Outback Systems racks, or the deep-cycle batteries would have taken up a bunch of his basement. The modular system only needed 3 racks, 2 for batteries, and 1 containing 4 2500-watt inverters and the control system. The rest of the basement was full of long-term storage food and supplies. Leroy found a small Homak gun safe, and Ricky opened it for him. There were a pair of AR-15's with 20 loaded 30-round mags, and a pair of Para-Ord 1911's with 10 loaded 14-round mags. In the floor were 2 cases of ammo - 1 of 5.56 NATO, and 1 of Corbon JHP ammo for the 45's. Leroy knew that Bret had a couple of spare shotguns, and some extra ammo, so they were set for weapons.

Sharon made Leroy dinner that night in "their" house, and Leroy found out that Sharon was a great cook as well. When they went to bed, she decided to sleep in her own room for now, which was perfectly OK with Leroy. The next morning after Breakfast, Leroy called Bret and asked if they wanted to go shooting. Allen drove the deuce to the range, and cleared off the shooting lanes, and when he called to say the range was clear, everyone met at the range. Leroy brought their Para-Ord .45's and the AR-15's so Sharon would be familiar with the weapons they would carry. Once the range was clear, Leroy explained the safety rules to everyone, then they put their eye and ear protection on. He decided to start Sharon with the Para-Ord on the pistol range with a 15-yard target because it had been a while since the last time she shot.

When he handed her the pistol, it was almost exactly like her old P-14, except her's was the P-14 Limited in Stainless. She immediately stepped into the Weaver stance, held the pistol at low ready, and when Leroy nodded, she raised the pistol, thumbed the safety down, and quickly put the whole magazine into the 5x kill zone of the B-27 target. Leroy stood there with his mouth hanging open - she shot as well as he did! Evidently the Gunsite training paid off. He had her shoot the next mag using the Failure to Stop drill, and she proceeded to put all 15 rounds into the 5x zones of the chest and forehead at 15 yards. "Guess I better not piss her off" Leroy thought to himself when he got a good look at her target, and decided then and there to switch to teaching her to shoot the AR-15. The AR-15 was the flat-top HBAR variant, and someone had mounted a red-dot sight onto the sight rail with QD mounts. As soon as he showed her how to work the rifle, and gave her some shooting tips on shooting prone, he had her do a dozen dry fires, noting where the red dot was pointed when the trigger broke. She commented that the rifle had a really light trigger, and Leroy guessed that someone had installed a target trigger group into these AR-15's, which would have been consistent with the HBAR setup. Finally he handed her a loaded magazine, and told her to put as many rounds as possible into the x-ring on the 100-yard target. 5 minutes later Leroy was shaking his head when he checked her group with his spotting scope, and no rounds had strayed out of the 9-ring. He wondered if they had any more 12-power Simmons scopes with another set of QD rings for the rail, and if she could shoot a 1-inch group with the 12x scope. If she could, he'd try and locate a .308 rifle for her as well, then try it at 300 yards.

They spent the rest of the day shooting their rifles and pistols. Leroy borrowed someone's MP-5SD and showed Sharon how to shoot it. When Brad saw that she was shooting it as well as Leroy was, he offered her one of his spare MP-5SD's. Bret gave them a case of 9mm defensive ammo to go with their MP-5's. Leroy told her the subguns were great for close-in defensive work, and the .45's were their last-ditch defensive weapon, or something to use to fight their way to a rifle, shotgun, or submachine gun. When they got home that afternoon, Leroy helped her clean her guns, showing her how to first field strip the AR-15 and MP-5SD, then detail strip both weapons to clean and reassemble them. He modified their LBV's to include 4 30-round magazines for the MP-5's. They still had 10 AR-15 magazines, and Leroy traded the grenade pouches on Sharon's vest for more magazine pouches to carry the 30-rounders. Leroy's LBV was almost identical to Sharon's except he had some grenade pouches for the 40mm grenades that fit his M-4/M -203 setup. He carried the 4 extra mags for his MP-5 in a kangaroo pouch, and 12 extra HE grenades for the grenade launcher in a bandoleer that he'd carry over his shoulder if needed.

She thought the BRV/LBV combo was heavy, and Leroy said that they only wore them when they were going into a dangerous situation, otherwise they just wore their pistol belt/E&E kits around the compound. He told her the compound was protected by a minefield, and the road was protected by claymores and an anti-vehicle mine. In the event of attack or emergency, they were to head to Bret's place which was much more defensible than any of their houses except maybe Jeremy and Natalie's. Sharon had seen Jeremy's place on their way to the shooting

range, and commented that it would take high explosives to hurt that house. Leroy nodded and grinned, and wished they could have had their house. Still he was grateful - they had a nice house, plenty of food and water, and Sharon was still young enough to have a couple of kids. That evening, Sharon gave Leroy a goodnight kiss, and he wished they were married.

He talked about it with Sharon the next morning, and she said she felt the same way. She had done her mourning for her husband while she was staying at Carl's, and wanted to have kids. Seems her biological clock was ticking too. Leroy gave her a kiss, and asked her to marry him. The kiss he got in return spoke volumes, so they called Brad and asked him if he could marry them. Leroy told Sharon that Brad was a mail-order minister, and became a pretty good preacher from giving a weekly sermon during their Sunday church service at Bret's house. Leroy called Bret and asked if they could get married at his place that afternoon. Bret laughed and said "What took you so long?" Leroy realized Bret was kidding him, and didn't reply. Bret said "Sure come on over, I'll get everyone together, say around 12:00."

Leroy looked at the clock, looked at Sharon, and realized this would be the longest 3 hours of his life. He kissed Sharon again, and said he needed to do something outside, and managed to stay busy until 11:00. He went inside for a shower, then they drove together to Bret's place for the wedding ceremony. They managed to find a parking space among all the vehicles, then they were mobbed by everyone as soon as they were inside the door with congratulatory hugs. They met in the living room at noon, and Brad married them in a simple ceremony. Lunch was the wedding reception, and they were confused by the pile of presents, and a cake waiting for them. Maggie told them that she made the cake once Bret told her that they were getting married, and the presents were the supplies Bret thought they would need for their new house, plus some stuff from everyone else. After lunch they opened their presents, then drove to their new house. The next morning, Leroy was as tired and as happy as he ever remembered. Even his honeymoon with his ex-wife wasn't as good as his honeymoon with Sharon. When she told him she'd like to have a couple of kids, he knew that he was in for many exhausting nights in the future.

***Near Grass Valley, CA that same day ***

Abby was now a precocious 10-year old, and was able to easily shoot the squirrels and other garden raiders with her Ruger 10/22 loaded with CCI CB longs out to 50 yards. She sat on the porch every morning and evening, picked off the garden raiders, then carried their bodies inside while wearing gloves after they had cooled and the fleas jumped off, then helping Sally skin and gut the little critters. While it wasn't as appetizing as the venison Ronnie brought home every month or so, the squirrel and rabbit carcasses extended their larder, and provided much needed protein. They could have used snares or traps, but Ronnie had over 10 thousand rounds of .22 ammo, including over 1,000 CCI CB longs for pest control and target practice for Abby. Robbie was now almost 8 years old, and had inherited his big sister's Daisy BB gun. Ronnie was teaching him marksmanship and basic gun safety with the BB gun and the pellet trap/target

box, much like he had several years earlier with Abby.

They spent part of each day working on their assignments for their home school, and the rest of the days doing chores or learning survival topics. Abby already had a full-fledged bug-out bag that Ronnie had scaled down to the size of a large daybag for her, and she wore her fanny pack with a canteen, E&E/butt pack, K-bar knife, and a first aid kit. Ronnie wanted to give her a pistol, but Sally didn't think she was ready for 1 yet. Ronnie had a little .22 Taurus automatic he knew she could handle, and it was better than nothing in his book. Matter of fact, he carried it as a hide-out gun for years while he was working with the Sheriff's department. He'd only been called out 3 times in the last 5 years, and neither were strictly law enforcement calls. 1 was to fight a fire, and the other was for a heart attack.

Without ALS and the helicopter, there wasn't much they could do for him except try CPR and wait with the wife while the victim died. Ronnie was furious that the town never bought an auto-defibrillator, or trained anyone beyond EMT I. The Sheriff explained that the County was the problem, since they weren't willing to raise County property taxes to pay for the Paramedics or the equipment. They put the fire out fairly easily, but the family was homeless and had lost everything by the time the augmented volunteer fire department had showed up. Under the circumstances, that was effectively a death sentence even though family and neighbors took them in and tried to help. Everyone in the town was caught short by the extended disaster, and people were starting to run out of food. Ronnie had taken to wearing his sidearm full time, and carrying his CAR-15/ M -203 combo when he patrolled the perimeter each day. He had laid various noisemakers and other warning devices along the border of his property to warn trespassers off. Just once in the last 5 years did he actually have to point a rifle at someone. Once they were on the business end of his CAR-15, the trespassers ran like scared deer.

Sally wore her fanny pack with the Glock 21 and 2 spare mags from then on out. Ronnie explained she was the last line of defense for the children, so she started practicing shooting again. They had a 100-yard range that backstopped into a mountain, so it was perfectly safe. Abby took the chance to try hitting targets at 100 yards with her 10/22 and some CCI Mini Mags. The rounds were loud enough that Ronnie insisted she wear earplugs, and after the first round, she was glad she did - between Ronnie and Sally's 45's and her .22 it was noisy on the range. Robbie was wearing a set of ear muffs and practicing with his BB gun and the pellet trap. Ronnie was proud of him, he was able to hit the small spinners at 20 feet often enough to keep things interesting. When he got a little older, he'd graduate to Abby's 10/22 and she'd get an AR-15, probably in a couple of years. Abby was doing really well at the 100-yard range considering she was shooting with open sights. Ronnie installed a Simmons 3x9x40 scope on the rifle, and boresighted it, then showed her how to zero the rifle. Once she got it zeroed, her groups shrunk from over 4 inches to almost 2 inches shooting prone with the scope. Ronnie decided to let her leave the scope on, and showed her how to use the zoom feature. She told him that the 3x magnification would make it easier for her to spot those pesky squirrels and

rabbits further out. Robbie told her the CB longs started dropping radically outside of 25 yards, so she shouldn't take a shot outside 25 yards with the CB longs in order to conserve ammo. Abby was regularly killing a squirrel or rabbit with 1 shot when she had garden duty.

Later that day, Ronnie showed Abby how to shoot the tiny .22 Taurus automatic over Sally's objections. He showed her how to hold it, how it worked, and how to clear a jam, load and unload the weapon. It had a tilt-up barrel making loading and unloading much easier. The trigger was double action, so she didn't have to cock the hammer. He showed her how to make sure the gun was empty by tipping up the barrel and removing the magazine, then showed her how to dry fire the gun, and had her do it until he was sure she was safe with the gun, then showed her how to load and fire the weapon. The PT-22 was about as small as Ronnie could safely manage, but was the perfect size for Abby's smaller hands. She seemed to be able to handle the stiff double-action trigger, and was used to clearing the safety before she fired her 10/22. He had her put the safety on, then handed her a loaded magazine, then a single cartridge that she stuck in the tipped-up barrel. She pushed the barrel down until it locked, took a good solid 2-handed grip on the pistol, making sure her non-shooting hand was well clear of the area above the web protector.

Ronnie had set up a target at 15 feet for her to start out, and had her align the sights right below the center of the X-ring, and squeeze the trigger. Her first round was in the 10-ring, but to the left, so he had her shoot the rest of the magazine slowly. About halfway through, he spotted her problem, and adjusted her grip. The rest of the magazine was well-centered, and in the 8ring or better (about a 5-inch group). When that magazine ran out, he handed her another magazine, and asked her to concentrate on the front sight instead of the target. Her second magazine was much better, and was inside the 9-ring. When she finished, he sat her down and explained the difference between target shooting and instinctive defensive shooting. He said that the little PT-22 wasn't a target pistol, and the sights were more for show than anything else. It's what his buddies called a belly-button gun. Abby laughed, so Ronnie explained what a belly-button gun was - a point-blank, last-ditch defensive gun designed to shoot someone at arms length. He told her he used to carry that gun on duty for years in case someone got the drop on him and made him drop his service auto. He carried it for years in a custom wallet holster in his front right pocket with the chamber loaded and the safety on. He had an ankle holster for it as well that would fit her, or she could carry it on a belt holster with 2 spare magazines.

"Whatever you think is best Dad!"

He decided for now to put it in a covered military style flap holster with 2 spare magazines on her pistol belt with the rest of her survival gear. That was really why he was giving her the gun, it was pretty minimal as a defensive weapon, but was a perfect hideout gun for a cop. Once Sally saw how well Abby was shooting it, and that she was handling the gun responsibly, she decided to not fight her husband over this. Ordinarily, she'd never let a 10-year old have

her own handgun, but as Ronnie pointed out, Normal went South years ago.

**Roseburg, OR That same day **

Jodi was in the kitchen cooking on the wood stove because the propane had finally ran out, and Paul hadn't located the Propane dealer's truck to refill it. They quickly located the depot after the snow melted, but the trucks were missing. Paul was frustrated because they could be anywhere in the county, or buried somewhere. He was grateful that Dennis' house had a massive masonry heater stove with a cooktop and they had plenty of wood due to their move into the basement shelter which saved most of their wood they would have had to burn to keep the house warm. Jodi missed Nicole, who ran into the stock clerk at Costco after the snow melted, and they risked a trip to Costco to stock up. They didn't have much left, and what they did have was expensive. They would have been totally out of food if it weren't for the last couple of shipments that reached Roseburg with the military convoys that were sent to evacuate people closer to the Cascades. The Costco truckers traveled with the convoy, and they got 4 trailers full of stuff. Luckily the last order they placed was for staples and canned goods. Paul spent what money they had left, and Nicole got asked on a date. She was 19, and Paul realized that it was time for her to start her own family. Robbie was dating one of the checkers there as well. She was a couple of years older than him, but there weren't many single men between 16 and 50 left around Roseburg. Nicole got married 3 months after she met Lance. Jodi apologized to Lance when she met him for making him spend a day in jail. "Don't worry, it was worth it to keep Nicole out of jail - as a minor they would have thrown the book at her. The DA was a real asshole, but when the paraffin tests came back negative, he had to cut us loose." Jodi and Paul both liked Lance, and she was glad that he was a good Christian man. When they located his pastor, he asked Nicole to marry him, and they were married that weekend. Jodi and Paul found them an abandoned house that was set up for survival with plenty of food, a well, a full tank of Propane, an AE system, and a diesel pickup. 6 months later, they showed up at Paul and Jodi's house with 2 announcements - They were expecting, and Lance had located the Propane truck. Lance helped Paul fill up his tank, and topped off their tank as well.

Robbie asked his dad if he could marry Elaine, the checker at the Costco. Robbie and Paul spent the next week checking out the nearby houses, looking for house like the one they found for Lance and Nicole. Finally they found a well-built, heavily insulated house with a steep roof. It was set up like Lance and Nicole's place, and even had a 500 gallon diesel tank full of treated diesel, a small tractor, and a Dodge Ram with the Cummins turbo-diesel engine. Once they got it all set up, Robbie showed the house to Elaine, and proposed. They were married the next week, and then Jodi and Paul were down to the younger two kids, who were almost 10 years younger than their siblings. It wasn't like they'd moved to Siberia, they were only a mile up the road.

^{** 6} months later, The Oval Office, White House, DC **

"It's the End of the World as We know it ... It's the End of the World as We Know it, and I feel fine!"

Condi walked in on George standing on his desk singing in his boxers "Mr. President, what's the meaning of this?"

"It's the End of the World Condi - I just heard that there was a massive earthquake on La Palma, and the entire volcano has slid into the Atlantic, causing a huge tsunami. Come on, sing with me - It's the End of the World As We Know it - And I feel Fine!"

Condoleezza Rice realized that George was more than off-key, he was off his rocker, and got on her cell phone, stepped out of the Oval office, and spoke to the head of the Secret Service. "Where's the Vice President? He is - Damn... The President is incapacitated. Actually he's in the Oval office wearing nothing but blue-striped Boxers and singing that REM song "It's the End Of the World As We Know It, and off-key as well. What do you mean we can't use the choppers - Too much ash? Right, we'll evacuate to Mount Weather by convoy - get all the limousines ready. Congress too! What do you mean we don't have enough limos? Very well, use any vehicles you can, but get them moving now!"

As Condi ran to the front entrance of the White House, she left George singing in his Boxers.

Chapter 42

*** Washington, DC later that day ***

Like rats deserting a sinking ship, the long convoy of limousines, armored Suburbans and vans drove rapidly toward Mount Weather, which had been alerted and activated. Secret Service and Capitol Police officers were directing traffic to get the convoy through. An hour later, when he got the word, the Governor of New York was furious that NOAA, FEMA, Homeland Security, or anyone never bothered to issue the Tsunami warning, now it was too late. All issuing an alert would do now was to ensure panic and further destruction of the East Coast. He didn't realize this was no ordinary tsunami, and would reach a height of over a mile when it reached the shore. Minutes before the Tsunami struck, everyone made it inside the shelter at Mount Weather, and the doors were sealed. Everyone breathed a sigh of relief, grateful to be alive. As the wave washed over the shelter, all the blast valves guarding the air vents failed and let millions of gallons of seawater into the shelter, drowning all the people inside. Ironically, the blast valves were scheduled to be replaced the year before, but due to Democratic budget cuts, the money was never approved. Hillary, Chuckie and Diane ran screaming up the tunnel, trying to reach the surface, only to find out the door was on a time lock to prevent some idiot congresscritter from opening it while the radiation levels were too high outside. As the water rose to their chins, they screamed, panicked, and tried to climb on top of each other. When Chuckie and Diane drowned and the human pyramid collapsed, Hillary fell into the water and drowned.

*** The Boardwalk, Atlantic City, NJ Later that same day ***

Damian and Kelly were visiting from Australia, and planned on getting in some surfing. They were both experienced "Big Wave" surfers and weren't impressed by the small Atlantic surf they had experienced so far. When the Casino broadcast the Tsunami Alert, they grabbed their boards and paddled out as far into the Atlantic as they could. They figured that at least a Tsunami would be over 6 feet! Kelly got worried when all the water started draining off the beach - he'd never seen a wave do that before - The Boardwalk went from being beachfront property, to several hundred yards from the water in just over a minute. They were too far out to paddle back, so they had to ride the wave no matter how big it got. Just over a minute later, they heard an ominous roar, then the wave appeared almost out of nowhere. Kelly sat on his board and watched horrified as the wave kept growing and growing.

Damian yelled at his brother "For God's sake paddle bro, if you don't catch it - it will kill you!" Kelly turned around and paddled for all he was worth. They both caught the wave about a mile offshore, and by the time it reached the shore, it was over a mile from crest to trough, and had a wavelength of almost 10 miles. They had both chosen their "Big Wave" boards and were surfing faster than they ever had before. They were both riding the face of the wave, and were

maybe 300 feet above sea level when the wave came onshore and they were directly in front of the Trump Plaza Casino, or more correctly, the Casino was directly in front of them. Damian made the correct choice, and accelerated down the face of the wave as fast as he dared to the left, while his brother stood on his board transfixed by the sight of the 34-story building immediately in front of him. 5 seconds later, his face smashed into the wall of the tower right before the building crumbled, squashing him like a bug on a windshield.

Damian didn't have time to mourn his baby brother, he was too busy dodging buildings in his way. He carved left and right like a madman, moving forward at a speed approaching 100mph. After an eternity, but in reality maybe most of an hour, the wave washed up against the mountains, depositing Damian on a snow-covered peak. He was only wearing a short wetsuit, and was soon violently shivering, standing there soaking wet in the snow barefoot. He grabbed his leash and pulled his surfboard to him and laid on it to get out of the snow. The next thing he knew, he was sliding downhill on his surfboard. Realizing he had to get off the mountain if he wanted to survive, he decided to go with it, stood up, and was soon snow/surfboarding down the mountain. His speed soon became uncontrollable, and he started to worry, but so far he was OK. Seconds later, he skied off a 1,000 foot cliff, and landed in the ooze left over from the flooding caused by the tsunami. He died on impact, and was buried deep as the ooze closed in over his body and his surfboard, entombing him.

*** Long Beach Harbor, 50 years later ***

HMAS Irascible, which used to be the USS Independence CV-62, now the largest ship in the Australian Navy, was considered a light carrier by the US, but it was twice as well armed and equipped as any of India's carriers. Australia finally realized they needed a real navy when the US started pulling out of the Pacific over 50 years ago, and bought and retrofitted a smaller US carrier that had been mothballed. The first thing they did was remove all the Flag Officer accoutrements, which made space for more aircraft and weapons. She was retrofitted with a modern nuclear reactor, replacing the 8 boilers, and increasing her top speed to a listed 40 knots. The Australian navy purchased 4 squadrons of FA-18G Super Hornets plus a full compliment of helicopters to transport the battalion of Royal Marines. One thing the Royal Australian Navy did right when the US pulled out of the Pacific was to reinstate the Royal Marines as a branch of the Royal Australian Navy because they remembered the US Marines had specialized in Amphibious Assault, and they needed Marines to defend and assault Pacific island beaches if necessary. HMAS Irascible was a fighting ship, the officers ate with the enlisted personnel in 1 mess hall, and every square inch possible was dedicated to war fighting. By the time it got out of refit, HMAS Irascible was a potent fighting ship with no wasted space, modern avionics and equipment.

The Australian Government was concerned when they hadn't heard any news from the US in over 50 years, so they send the HMAS Irascible plus 2 Anzac class frigates for ASW protection. They docked in Long Beach harbor, and sent the C-2a Greyhound to investigate

while the E2-C Hawkeye and 2 Super Hornets kept a watch over the CBG. They had mounted a belly camera and radio monitoring gear aboard the Greyhound to take pictures and listen for any radio transmissions. The first couple of days it flew progressive sweeps of Southern and Northern California, and landed back on the carrier to refuel and load film. 1 week later, the Commander was shown pictures showing signs of farming in the San Joaquin Valley, and another huge community centered in the Angeles Forest near Glendale. He decided to send an unarmed Blackhawk to the San Joaquin Valley first to investigate. The Royal Marine Captain was under instructions not to act in an aggressive manner, they were trying to establish contact, not start WWIII. The helicopter overflew the largest farmhouse in the area, and dropped a message in a plastic soda bottle, then a radio in a padded case. 5 minutes later, the radio came alive.

"Who are you, and what the heck do you want?"

"This is Captain Smith of the Royal Australian Marines. We're trying to establish contact with anyone in the US. You've been out of touch for about 50 years. We would like to land and talk in person. All we have is our personal weapons, and we mean you no harm."

"Ok leave everything but your personal sidearms in the chopper, and I'll talk to you."

Captain Smith instructed the pilot to set down gently near the farmhouse without causing damage to anything. The pilot set down as gently as a feather, and reacting to the cut sign the Captain was giving him, cut his engines. The Marines opened the door, and Captain Smith stepped out without his rifle as he promised. He could see several rifles trained on the chopper, but no one was making a hostile move, so he stepped away from the chopper toward the house with his hands in plain sight. Finally the farmhouse door opened, and an older man stepped out, then walked over and shook hands.

"Sorry about the warm reception, but we haven't seen anyone for almost 50 years. Could you tell us what happened?"

Captain Smith sat on the porch and filled the old farmer in. "You probably remember Yellowstone erupting?"

"Vaguely, I was much younger then."

"About 5 years later, the La Palma Volcano in the Canary Islands off Spain finally blew, and the two halves of the mountain slid into the Atlantic, causing several huge tsunamis. We heard on the radio that the first one was the biggest at over a mile high when it reached shore, and it destroyed or flooded everything within 100 miles of the eastern seaboard. We haven't heard anything from the US since then. We finally got our act together and were able to come over here and check it out."

"The Chinese government imploded when they couldn't sell all their junk to the US. They were deep in debt, and using the monthly income from the sales of consumer goods to the US to purchase weapons and oil from elsewhere instead of feeding their people. When they ran out of money, no one would ship them any oil, and the Army rebelled. The Taiwanese Government offered to take over, and the Army decided to switch sides, since the Taiwanese were Chinese, and they had the credit necessary to buy food and oil. When they took over the mainland, the first thing they did was start a massive privatization program, and encouraged peasants to cultivate their own land, and for them to expand their farms as quickly as possible. They built factories to make diesel tractors and sold them cheaply. Two years later, they were producing enough surplus food that they were making almost as much money as Capitalists as they were when they were Communist, except this time the money stayed with the people where it belonged. Demand grew for consumer goods, and the factories that shut down when the US went Kablooey were re-opened and were producing goods for local consumption. The 10% sales tax the government imposed was sufficient to maintain the army at a smaller more manageable level, with half of the conscripts returning home to their farms and families.

North Koreans saw the prosperity of their once-communist brothers to the North, and revolted, killing all their leadership. Once they were dead, the South and North reunited peacefully since the North was no longer a military threat to the South. The new Korea followed the example of Mainland China, and soon the entire Korean Peninsula was prosperous and able to feed itself again. Russia was able to relax for once when the Chinese Government signed a peace treaty in Moscow. There were still some hot spots in Indonesia where the Muslims were in the middle of an uprising that threatened the region. Australia and New Zealand activated the ANZUS provisions for mutual defense, and both countries upgraded their military capabilities. For the first time in Australian history, they removed the straitjacket from the Special Forces operators, who quickly infiltrated and neutralized the Muslim threat to the region. Once things had settled down, we decided to go find out what happened to the US - sorry it took so long."

"Ok, that fills in a lot of blanks. We haven't heard anything on the radio either, and assumed that something had happened. What about Europe?"

"The Nuclear Winter whittled the population of Western Europe down to size, and when things got back to "Normal" the French decided to invade Germany. The German's counterattacked, and with their much better weapons and soldiers, basically destroyed France. They kept a large portion of Eastern France, and the other countries absorbed parts of it as well. France has ceased to exist for almost 20 years. Britain survived by the skin of their teeth, but almost half their people were dead from disease and starvation. When the Tsunami hit, most of the rest of the survivors were wiped out too. Only the highlands of Scotland and parts of Ireland weren't destroyed by the wave and the flooding. Most of London was either destroyed or flooded when the Thames River went 20 feet over flood stage due to the influx of sea water. The British

Parliament had no where to go, and no where to hide. As of now, Ireland and Scotland are finally free, and acting as independent nations. The low-lying parts of Northern Europe were catastrophically flooded and wiped out. The Mediterranean and Middle East suffered heavy coastal flooding when the Mediterranean Sea rose 50 feet due to the Tsunami."

"Holy Cow, did anyone survive?"

"From what we've heard over the radio, Most of Central and Eastern Europe, and the parts of South America, Africa, the Mediterranean, and the Middle East that weren't flooded by the tsunami. We still haven't heard anything from Alaska and Canada. My guess is the interior of Alaska, and Western Canada are fine, but incommunicado. Central and Eastern Canada are probably toast. The good news is the UN is history. All the delegates and the Secretary General drowned when the tsunami hit, and the building is probably destroyed."

"It's funny, we've achieved the CFR's and UN's world population goals, and now they're gone!"

"I'd call that pretty bloody ironic. So how'd you survive?"

"We survived the earthquakes by dumb luck, and moved to the San Joaquin Valley before Yellowstone blew. We scavenged seeds and equipment from abandoned farms, or farms where the owners died. We had just enough food stored to weather the Nuclear Winter, then as soon as the skies cleared, we started planting like crazy. We had plenty of diesel fuel thanks to the fuel depot 2 miles away, so we quickly organized all the survivors, distributed the diesel and seeds, and managed to bring in a bumper crop. We traded with our neighbors, and eventually made contact with other survivors. Sometimes it was a trap, and we took casualties, so we've learned to be cautious at first contacts. There's this group of survivors up in the Angeles Forrest near Glendale that you'd have to see to believe. They managed to scavenge anything that wasn't nailed down, used the equipment at a nearby mine to build some earth-sheltered buildings and built some strange-looking steam-powered generators. They survived the Yellowstone supervolcano in the best shape of any group of survivors. Several groups of renegades tried to attack them and take what they had, only to get turned into sushi by highexplosives. We've traded with them off an on for the last 50 years. If you want to contact them, I'd highly suggest calling them on the radio first, and go in nice and gentle-like, they're loaded for bear."

"What frequency should I use?"

"You've got military radios, so I'd recommend the US military GUARD frequency since they're probably monitoring it."

"Thanks for the information, is there anything you need?"

"Just medicine and any weapons you can spare. All we have is a bunch of bolt-action rifles."

"OK, I'll have someone drop off some stuff when we're in the area again. Keep the radio, we'll call first."

"Thanks Captain."

Captain Smith got up, jogged back to his helicopter, and flew back to the HMAS Irascible. He met with his CO, and they called on Guard "Angeles Forest Group, this is the HMAS Irascible on Guard, please respond - we're friendly."

"Go ahead Irascible, we read you."

"Ok if we meet face to face?"

"When and where?"

"How about your place?"

"Negative, how about the old Hospital in Glendale - I think it was called Verdugo Hills Hospital."

They checked a map of Los Angeles, CA, and located the hospital. "Ok, got it on the map. How about 0900 tomorrow. We'll be in a Blackhawk."

"OK, see you then. Just make sure you don't try anything funny."

"Sir, like I said, we're just trying to make contact and find out what happened. I'll leave my support troops in the helicopter if it makes you feel safer."

"I'd appreciate that - see you tomorrow at 0900."

The next morning, Captain Smith's Blackhawk landed on the helipad at the hospital. A single Bradley Fighting Vehicle drove up next to it, and waited for Captain Smith to emerge. He got out by himself, then the rear ramp opened on the Bradley, and Ricky and Allen stepped out, shook Captain Smith's hand, then they asked him if they could sit down in the Bradley. They left the ramp open, and sat down.

"OK, Captain, we're all ears."

"We're trying to make contact with people in the US. We've heard nothing from the US in almost 50 years. I met with a gentleman from the San Joaquin Valley that told me about your

group. So far your two groups are all we've found that were organized to your level in California. By the way, nice Bradley!"

"You like - we found it sitting off to 1 side at the depot in Barstow California. We took advantage of a break in the weather, and took everything that wasn't nailed down at Barstow when we realized that we were badly under-armed. There wasn't much left, but what there was has kept us alive through 3 attacks."

"Do you need anything?"

"Not really, but our medical supplies are all expired, so anything you could spare would be appreciated. So what happened with the rest of the world?"

Captain Smith told them the same story he told the farmer the other day. When they found out that the UN and the Federal Government probably drowned in the tsunami, Ricky said "Good riddance!" and they both laughed. Finally they were finished talking, and Ricky said "We really need to get back. If you need anything, contact us on Guard." They shook hands, and Captain Smith climbed back into his Blackhawk. As soon as the chopper left, Ricky and Allen drove the Bradley back to it's lowboy where the rest of their team waited with 2 more Bradleys and a couple of TOW armed Hummers. When the Bradleys were secured on their lowboys, they drove back home.

Over the next year, the Royal Australian Navy investigated the rest of the west coast of the US, and didn't find much in the way of organized towns, just isolated pockets of survivors. Based on what they'd heard, they decided to check out the Midwest to see if there were any survivors. They landed at Mountain Home Air Force Base and located a KC-130 sitting on the tarmac. They checked it out, and were amazed to discover it was in flying condition. They decided to leave the Greyhound there, and send the KC-130 with 2 Super Hornets as far East as they could, and see if either Davis Monthan or Holloman AFB was usable. They hoped Davis was usable, and had fuel, since Holloman or Kirtland were almost twice as far away. As slow as the KC-130 flew, it was a long flight, but they were able to get fuel at Davis Monthan and continue on to Kirtland. They were monitoring guard as they approached Kirtland, and received a major surprise when a military controller said "bogey at radial 270, flight level 25, please ID and turn on your IFF, or you will be considered hostile."

Just to be on the safe side, the FA-18 pilots stayed tucked in close to the KC-130 to merge into it's radar signature. The pilot of the KC-130 called back on guard. "This is Colonel Smithers from the Royal Australian Navy flying a borrowed KC-130 replying on Guard. We're friendly, and on a search mission to locate survivors in the United States."

The Controller replied "Very well RAN, maintain altitude and heading. Continue to approach." As they flew onward, the pilot and controller maintained their conversation. Meanwhile, 2

USAF FA-18's were dispatched to intercept the intruder. When they got close enough, they called back that there were 2 FA-18 Super Hornets in trail. The USAF controller was not a happy camper.

"RAN flight, what's the meaning of the FA-18's escorting you."

"Easy there bloke, we're a long way from home, and my CO aboard the HMAS Irascible just wanted to make sure we'd get home OK. If you're pilots will take a closer look, they'll see that there are only self-defense weapons on the Super Hornet's weapons pylons." Moments later, the USAF Hornet pilots confirmed to the USAF controller that there were only self-defense missiles on the weapons pylons. That made the controller feel better.

"OK RAN flight, state your intentions."

"We wish to land and refuel, talk to your commanding officer, and if it's OK with him, to continue our flight east to make contact with survivors."

"OK, but you'll have to pay for the jet fuel."

"We brought plenty of gold coins with us just in case. We doubted anyone who had fuel would accept a Royal Australian Navy Purchase Order."

They landed without further incident, met the CO, who was intrigued by the Australian's story, and allowed them to refuel their aircraft for 10 ounces of gold. He told them they could refuel on the way back to their carrier for the same amount of gold. Once they had everything they needed, they took off. They now had enough range to check out the southern half of the US and try to find a base somewhere in Texas or Oklahoma with jet fuel. In a pinch they'd settle for kerosene or diesel if that was all they had. The CO of Kirtland gave him a list of USAF bases that might have fuel, and were south enough to avoid most of the ash. There was Dyess AFB just south of El Paso Texas, Moody AFB in Southern Georgia, Seymour Johnson AFB in North Carolina, and Shaw AFB in South Carolina. There were several bases north of the Mason-Dixon line, but he was pretty sure they were covered with over 6 feet of ash. They flew east to Moody AFB near El Paso, and saw the runway was clear and the base abandoned, so they landed. They only stayed long enough to refuel and dump their porta-potty and take on fresh water. From El Paso, they diverted as far north as they dared, and kept an eagle-eye on their fuel state. They occasionally took pictures, and the radio operator was busy recording ham and CB traffic for later analysis. The people in Texas and Oklahoma had settled into small villages like the Californian farmers. They made it as far north as Whiteman AFB, MO before they had to head south. They landed at Whiteman even though the base was deserted and the runway was covered with volcanic ash. The wheels of the C-130 kicked up a dust cloud, so they advised the FA-18's to stay airborne upwind of the base, and they'd refuel them in the air. When they saw the huge cloud of dust, the FA-18 pilots readily agreed. They set their throttles

to minimum loiter speed, and flew a lazy-8 pattern around the western edge of the base. Finally the KC-130 took off again, and as soon as they reached altitude, they refueled both Super Hornets, which were almost bingo fuel. From Oklahoma, they traveled East, but didn't hear a peep on the radio. From there they flew south, and gassed up at Seymour Johnson AFB. When the KC-130 landed, it kicked up salt spray. They didn't know it, but the base had been partly flooded and abandoned because of the tsunami. The taxiways were under 6 inches of salt water, so they told the Super Hornets to loiter again while they filled up. The pilots were very happy to see the KC-130 lift off an hour later with full tanks to fill them up. They flew back to Dyess AFB in Texas, and they all landed, filled their tanks, stretched, and emptied their portapotties, and refilled their fresh water supply before heading back to Davis Monthan AFB. They had plenty of gas to make Davis, and decided to save their gold for later.

When they landed at Davis, there was a jeep on the taxiway with someone in it. The Crew chief got out, and walked up to the jeep carrying his M -4/203 and wearing his BRV/LBV with chicken plates. Suddenly the driver raised a rifle and opened fire, striking the crew chief in his front plate. The chief dove to the ground, and emptied a magazine into the jeep, killing both the occupants. Curious as to why someone would be dumb enough to shoot at him, he walked up to the Jeep and checked on the occupants. They were wearing worn and smelly civilian clothes, and were armed with a SKS each. A tattoo on the forearm of the driver got his attention, and he recognized it as a biker tattoo. That explained why they shot at him - they must have been a bunch of renegades looting the airfield for whatever they could get. He threw the bodies out of the Jeep and drove to the fuel farm as quickly as possible.

He didn't see anyone, and he radioed the KC-130 to get over there as fast as they could, and keep the FA-18's airborne just in case. The pilot didn't need to be told twice, and broke all records taxiing over to the fuel farm. They filled the tanks as full as they could while leaving the engines running. Hot fueling was a risk, but in this case, it was worth the risk. No sooner had they finished, then another Jeep drove up. The Crew Chief didn't take any chances, and as soon as it got within range of his M -203, he fired a HE grenade striking the hood of the Jeep, and basically blowing it up. The remains of the vehicle burned, and they taxied back to the runway as soon as the chief disconnected the fuel lines and climbed aboard. The pilots got out of there as fast as they could, and fire walled the engines until they were 3000 feet AGL. When they reached a safe altitude, they refueled the FA-18's and turned for home. They contacted the HMAS Irascible on their tactical radio and described everything they'd seen and heard.

They landed at Mountain home, the Crew chief noticed something, and called the pilot's attention to it. The plane had a tail hook! They never knew of a KC-130 with a tail hook, but this one had it. That gave the pilot an idea, so he called his CO, who gave him permission to fly the KC-130 back to the HMAS Irascible and his co-pilot to fly the Greyhound. It was a risk, but they felt it was worth it to get mid-air refueling capablity. Several hours later, a very tired pilot safely landed the KC-130 on the aircraft carrier's deck. They had departed Long Beach and met the planes in the ocean north of Long Beach to shorten their flight, then they

turned South and steamed for the tip of South America, they were going to send in the Royal Australian Marines via helicopter to recon the east coast of the US.

Just over a month later, HMAS Irascible arrived just off the Atlantic coast of America. Their E-2C was sniffing the coast for radar targets as they approached, and both ANZAC frigates were busy making sure there were no submarine contacts in the vicinity. When they were sure the coast was clear, the Irascible hove-to 10 miles off the New York coast and sent in an armed Kiowa Warrior helicopter to recon the coastline while the Greyhound orbited the CBG and listened for radio traffic. The 2 catapults had the plus-5 FA-18's on alert to save fuel. As the Kiowa warrior crossed the beach, they reported no contacts, and told the CO that New York city still hadn't been rebuilt. The Admiral thought that was odd, and asked the Kiowa to proceed inland. Finally they located signs of habitation, but it was on the far western side of New Jersey, and it was just a bunch of tents set up in a tent city. There was an American Flag flying in the center, so they called back, and the Admiral detached a Chinook full of Royal Australian Marines to check it out. He launched the FA-18's with a full weapons load to act as an armed escort, backed up by the armed Kiowa.

The chinook landed long enough to deploy the Marines, and took off again to orbit a safe distance away. They marched in Combat file to the center of the compound where the American Flag stood. They saluted the flag, and were greeted by a mousy-looking guy with long stringy hair, a long unkempt beard, square framed glasses, and the distinct odor of Marijuana.

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"What can I do for you guys?"
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An hour later, a bunch of people who looked and smelled like the other guy gathered around the flagpole, asking a bunch of questions. Captain Smith couldn't get a straight answer out of any of them, and realized they were all high on pot.

[&]quot;Are you in Charge?"

[&]quot;I am today."

[&]quot;What is going on here, we haven't heard anything from the US for over 50 years."

[&]quot;Wow - all this way just to say hello - let me get the committee together."

[&]quot;Is ANYONE actually in charge here?"

[&]quot;Not really, we have committees for that, but they get voted on once a month."

[&]quot;Judging by the looks of the cities, you haven't tried to rebuild yet?"

"Why should we, so another tidal wave will destroy it again?"

His comment was met by a bunch of choruses of "Right On Brother!"

"So what have you been doing for the last 50 years?"

"Surviving, we found some seeds and planted a garden, and found some other seeds and planted some other stuff."

"By other stuff - I'm assuming marijuana from the odor around here."

"Dude, you're pretty smart - you want to be in charge around here?"

"No way - I've got to get back to my ship."

They gave him the grand tour, and everyone was filthy, living in squalor, in old warn-out military surplus canvas tents with whatever they had for blankets. The garden looked poorly tended, and the marijuana field looked recently picked over. He shook his head, called for the Chinook, boarded his Marines, and flew back to the Irascible. As soon as he could, he took a shower to get rid of the pungent odor of marijuana, and threw his BDU's in his laundry bag and dropped it in the laundry chute. Forewarned, the laundry workers quickly processed the BDU's from the Marines that came back from the camp. The Kiowa warrior searched all the way to the mountains, but only saw several more camps like the previous one. When the Admiral heard that, he said "Damn Liberals were always just a bunch of lazy Hippies, and it didn't take much for them to revert to that state - let's get the heck out of here and go home."

With that, the HMAS Irascible turned and steamed for home.

The End